ADOLESCENT MOTHERS: PERCEIVED STRESSORS, SOCIAL SUPPORTS AND COPING DURING THE PUERPERIUM

by

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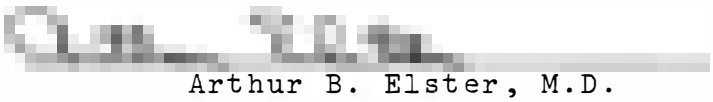

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FINAL READING APPROVAL

To the Graduate Council of The University of Utah:

I have read the dissertation of [redacted] in final form and have found that (1) its format, citations, and bibliographic style are consistent and acceptable; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the Supervisory Committee and is ready for submission to the Graduate School.

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ABSTRACT

This study was undertaken to describe the adolescent mother's experiences during the puerperium. Specifically, its purposes were to explore her perceived stressors, the coping strategies she used to deal with these stressors and the unpleasant emotions they generated, and her perceived social supports.

The data were gathered from a convenience sample of 34 adolescents from three hospitals in western New York. Most subjects were 17 or 18 years of age, black, single, living at home with their families, and from the lower socio-economic strata. Each adolescent was interviewed in the hospital, and then in her home at two and four weeks post hospital discharge.

Findings indicated that most of the adolescents in this sample did not consider the first month home from the hospital to be a time of major stress approaching crisis proportions. Some factors which seemed to contribute to this included: coping with potential stressors prior to the actual birth; a heavy reliance upon help from family during the puerperium; and past experience with childcare. However, the following were of some concern to the adolescent during this time period: various aspects of babycare; the responsibilities and limitations brought about by motherhood; body image; interpersonal relationships including those with the adolescent's family, the father of the baby and his family, and peers; and

concrete problems such as finances, health, living arrangements, school, and managing a household.

Problem-focused coping strategies seemed to be used more often in response to concrete problems, while emotion-focused strategies were used more often when dealing with interpersonal problems. A major method of coping with stressors involved turning to others, especially the family, for help. This was a predominant means of coping with the adolescent's concerns regarding the baby and babycare in particular.

During this time period, the adolescent's mother was the most important provider of social reinforcement, and tangible and cognitive supports; the father of the baby was the most important source of emotional support; and peers were most important regarding socializing. The provision of social reinforcement seemed particularly important in enhancing the adolescent's sense of competence as a mother.

The findings suggest that clinical interventions offered during the puerperium may not be well-received by the adolescent mother because she does not perceive a major problem which can be met by such services. In addition, results suggest that clinicians involve the adolescent's own mother in both assessments and interventions since she is the adolescent's most important source of information and assistance during this time.

CONTENTS

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LITERATURE REVIEW

In 1978, 532,635 adolescent women, 15 to 19 years old, had live births (Baldwin, 1981). Despite the fact that almost all adolescents who carry their pregnancies to term, keep and raise their babies (Zelnik & Kantner, 1978), relatively few research efforts have been directed toward in-depth assessments of the types of stressors these mothers encounter during the puerperium, how they cope with such stressors, and the kinds of social supports most important to them during this time. Furthermore, the information that is available neglects the importance of different aspects of psychosocial development that may differentially affect these three major constructs.

Both stress and social support have recently been shown to be related to variables which indicate how well a mother is adapting to her new role. For example, emotional stress has been associated with puerperal depression (Paykel, Emms, Fletcher & Rassaby, 1980), less secure mother-infant attachments (Vaughn, Egeland, Sroufe & Waters, 1979), less satisfaction with parenting and less sensitivity to infant cues (Crnic, Greenberg, Ragozin, Robinson & Basham, 1981a, 1981b). On the other hand, different aspects of social support have been found to be related to high levels of maternal affection and low levels of maternal indifference, aggression, and rejection (Colletta, 1981), more maternal satisfaction with parenting (Crnic et

al., 1981b), and more secure mother-infant attachments (Crockenberg, 1981). It is particularly important to determine the role that these factors play in the adolescent's adaptation to motherhood since recent research supports long-standing concerns about this group's ability to adapt successfully to certain aspects of the mothering role. For example, investigations indicate that adolescents, when compared to their adult counterparts, are likely to spend less time vocalizing to their infants, display less contingent vocalizations, and engage in less trunk contact and cradling during feeding (Baldwin, 1980; Field, 1980; Jones, Green, & Krauss, 1980; Osofsky & Osofsky, 1970; Sandler, Vietze, & O'Connor, 1981). Variation, of course, does exist among the behavior of adolescent mothers, and it is quite likely that some of this variation may be due to differences in perceived stress, varying success in coping strategies used, and differences in the availability and adequacy of social supports.

Thus, the overall purpose of this study was to conduct an in-depth investigation of the perceived stressors, coping strategies, and perceived social supports of a group of adolescent mothers during the puerperium. The exploration of psychosocial stress and its repercussions upon health and adaptation has become a central focus of nursing practice research. Within the context of adolescent motherhood, a study of this nature has particular relevance for nurses concerned with enhancing maternal-child health. It has been the responsibility of such nurses to prepare pregnant adolescents, not only for their labor and delivery, but for their transition to motherhood (Panzarine, Friedman, & Sutter, 1981). They are often the

health providers most frequently in contact with these young women, not only during pregnancy, but also during the early postpartum period. Thus, during this time period, nurses are in key positions to identify adolescents at risk for problems in mothering, and to intervene to enhance parenting efforts. If variation in perceived stress, coping, and perceived social support can, indeed, affect the adolescent's adaptation to motherhood, then an in-depth knowledge of these factors will contribute to nurses' systematic identification of high risk pregnant adolescents. Furthermore, this information can foster the development of more relevant and comprehensive nursing interventions aimed at enhancing adaptation to motherhood.

Conceptual Framework

The following conceptual framework upon which this research is based draws heavily from Lazarus' (1980) cognitive-phenomenological paradigm describing the stress process. First, the major components of the model will be defined, and then hypothesized relationships between these components will be identified. (See Figure 1)

In this model, stress exists whenever there is an imbalance between environmental or internal demands and the individual's available internal and external resources. These demands, or potential stressors, can be characterized according to a variety of dimensions. The more precisely these characteristics can be defined for each potential stressor, the greater our powers of prediction will be.

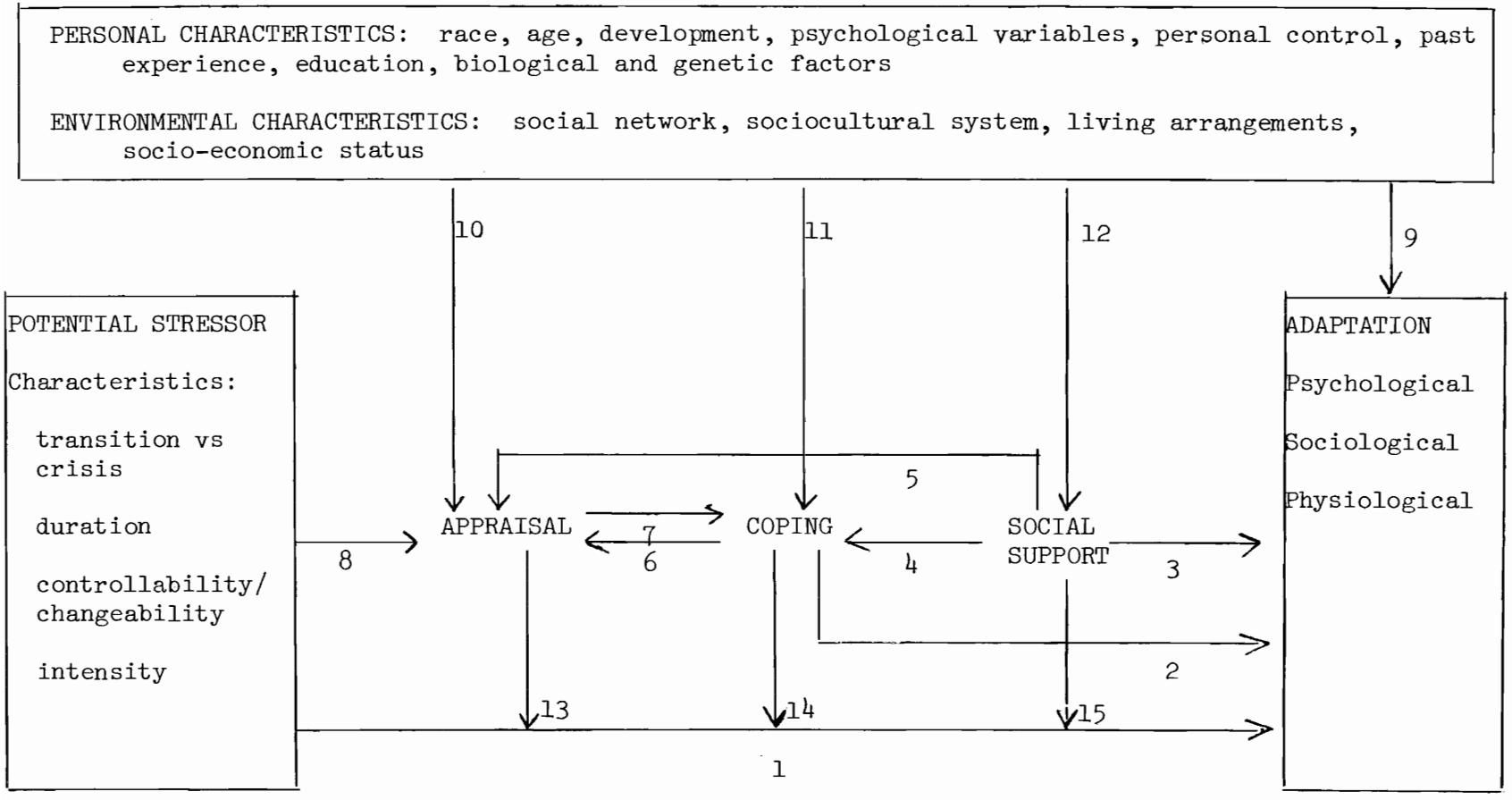

Figure 1: The Stress Process

A key mediator determining the balance between demands and resources is the appraisal process. Not all events have the same meaning to all persons, and it is the individual's evaluation of a particular event which determines whether it is viewed as either irrelevant, positive, or stressful.

Coping is called into play when demands are appraised as taxing the individual's available resources. Coping can be defined as "...cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands..." (Folkman & Lazarus, 1980). Coping serves two major functions: to change a stressful transaction so that the imbalance between demands and resources is reduced, and to manage stress-related emotions.

In this model, social support is defined as:

> an interpersonal transaction that consists of the expression of positive affect toward another person, the affirmation or endorsement of certain behaviors or attributes of another person, or the giving of material or symbolic aid to the other person (Kahn, 1976, p. 17).

It is the individual's perception that such support is both available and adequate to meet one's needs in a given situation, rather than any objective assessment of the presence of a support component, that is considered salient in this framework.

An individual's adaptation to a particular stressful event occurs as a response or modification over time, and takes place on a variety of levels: psychological, social, and physiological.

Personal characteristics refer to any factor having to do with the individual, and include such things as race, age, different aspects of development, psychological characteristics, the sense of

personal control, past experience, education, and a broad array of biological and genetic factors.

Environmental characteristics refer to any factor having to do with the broader context within which the individual lives and functions, and include such things as his social network, his sociocultural system, and his physical living arrangements.

The conceptual model presented in Figure 1 depicts several relationships among the major constructs. Stated in general terms, these relationships are as follows:

1. The characteristics of the potential stressor will affect the type of adaptation. (Arrow 1) The intensity of the potential stressor, the length of time it exerts its effects, and whether it is controllable or not, are all characteristics which will have differential effects upon how the individual will ultimately adapt to the situation.

2. The greater the individual's coping abilities, the more successful the adaptation. (Arrow 2) The more varied and well-suited the individual's coping is to the particular demand with which he is faced, the more likely he is to eventually adapt successfully to the situation.

3. The greater the perceived availability and adequacy of social support, the more successful the individual's adaptation. (Arrow 3) Implicit in this proposition is the requirement that the type of social support offered fit the specific perceived needs of the individual in a given situation. It is this match that will contribute to the individual's adaptation.

4. The perceived availability and adequacy of social support will determine, in part, the type of coping strategies used by the individual. (Arrow 4) Specifically, the subjective sense of the availability of a support system which is well-suited to help with a particular problem may influence an individual to utilize coping strategies involving turning to others rather than other strategies.

5. The greater the perceived availability and adequacy of social supports, the more benign the individual's appraisal of the potential stressor. (Arrow 5) If the individual feels he has persons within his social network whom he can call on to help in time of need, then a potential threat may not be evaluated as stressful.

6. The greater the individual's coping abilities, the more benign his appraisal of the potential stressor. (Arrow 6) The more confidence the individual places in his own internal resources, the more likely he is to see a potential threat as something which he is able to manage or control and thus perceive it to be less stressful.

7. The type of appraisal determines whether an individual's coping strategies will be mobilized. (Arrow 7) As mentioned earlier, a demand must first be appraised as straining or exceeding the individual's available resources before coping is actually called into play.

8. The characteristics of the potential stressor determines the nature of the appraisal. (Arrow 8) Certain objective features of a potential stressor will contribute to an individual's evaluation of the situation. For example, an event that is transitory will be viewed much differently than a stressor that is chronic in nature.

9. Certain personal and environmental characteristics will directly influence the type of adaptation. (Arrow 9) For example, previous experience with a situation may directly affect how well an individual adapts in the short-run to a similar experience. An individual's sociocultural system may offer ready-made solutions to certain problems that may also influence an individual's adaptation.

10. Personal and environmental characteristics will influence the nature of the appraisal, the individual's coping, and the type and amount of social support provided. (Arrows 10, 11, and 12) Factors such as an individual's education or the beliefs of his sociocultural system may influence how an event is appraised. Different psychological characteristics and developmental factors may play a role in determining how he copes with a given situation. Certain structural characteristics of the individual's social network may put restrictions on the type of support that can be provided during particular situations.

11. The appraisal process, the type of coping employed, and perceived social support will all buffer the effects of the potential stressor upon adaptation (Arrows 13, 14, and 15). For example, the individual who appraises an event as problematic but within his means to control, will probably have less felt distress than the individual who views the event as catastrophic with no means of solution. Coping can exert a buffering effect when strategies are used that deal directly with changing some aspect of the stressful event. Social support can have a similar action. For example, tangible assistance such as money or gifts may mitigate the impact that

financial needs could have upon an individual.

Empirical data relating to this hypothesized model will be expanded upon in the following sections.

Stress Process

General overview

The term "stress" continues to be a somewhat ambiguous concept, alternately being defined as a stimulus, a response, or a transaction. Physiological and psychosocial disciplines have conducted studies of stress along rather separate lines, and differences in the focus of stress definitions reflect their differing emphases. The psychosocial fields are more apt to conceptualize stress as a stimulus, focusing upon internal or environmental demands or insults, while the physiological and biochemical researchers, most notably among them being Selye, tend to view stress as the body's response to a noxious stimuli (Mason, 1975; Mikhail, 1981; Selye, 1975, 1980). It has also become common, especially in the psychosocial literature, to find stress described as a transaction: that is, an imbalance between some type of internal or external demand and the individual's abilities or resources which can be mobilized to respond to that demand (Caplan, 1981; House, 1974; Lazarus, 1980). It is this latter description which will be used as a working definition of stress in this study since, as will be discussed later, to label any particular event as stressful ignores a multitude of factors which contributes to the individual's perceiving the event as such.

Given the lack of consensus regarding an integrated conceptualization of the term itself, it is not too surprising that there is no broadly accepted model or theory guiding the development of research in this field. Rather, in their 1970 review, Scott and Howard identified as many as eight competing models of stress. Each had several limitations, one of which was the questionable relevance each had to problems outside its original frame of reference. Despite this confusion, however, research in this area abounds. In the psychosocial arena, the major thrust of empirical work has been to examine the relationship between psychosocial stressors and various physical or psychosocial outcomes. While much of the available data support the existence of such a link (for reviews, see House, 1974; Hurst, Jenkins, & Rose, 1976; Jenkins, 1976), the nature and extent of this relationship is still unclear (Dohrenwend & Dohrenwend, 1978). Part of this difficulty can be attributed to problems related to the three major components of the stress process: the potential stressor (or stimulus), mediating factors, and the stress responses.

Surprisingly little attention has been given to the importance of characterizing the nature of various stressors (for exceptions, see Cassel, 1974; Lazarus, 1980; Levine & Scotch, 1970). In order for accurate generalizations to be made , something must be known about the type of stressor which has been examined in a particular study. The greater our understanding about various characteristics of stressors most likely to generate problems, the greater our powers of prediction will be. Some categorizations which have been suggested

for this purpose are: determining whether the event is perceived as being controllable or uncontrollable (Lowenthal & Chiriboga, 1973; Suls & Mullen, 1981); identifying whether the event is a psychosocial transition, a crisis, or a deficit situation (Parkes, 1971; Weiss, 1976); or characterizing the event according to its duration (Cohen, 1981). These latter two characterizations have particular relevance for the focus of the present research. Cohen identifies four types of stressors based upon their duration. One group consists of events which are acute and time-limited, such as surgery. Another consists of chronic, intermittent stressors which may occur once a day, every week, or only once a month. A third group involves chronic stress conditions, such as being disabled. Finally, a fourth type can be termed "stress event sequences." Adolescent motherhood can be viewed as an example of this type of potential stressor. In this group, one event initiates a series of other potentially stressful events extending over a period of time. This description seems to overlap to a large extent with Weiss' definition of a transition situation which is characterized by a period of relational and personal change (Weiss, 1976). Thus, the individual faced with these types of situations may actually need to respond to a <u>variety</u> of stressors over the course of time. Motherhood during adolescence presents the teenager with just such a situation. A variety of potential stressors are triggered by the birth of the baby, extend well into the first year postpartum , and precipitate changes in the teen's relationships with family, peers, and in her view of herself. A value of identifying whether a particular situation is such a stress

event sequence or transition lies in the attention which is drawn to the consequences of the initial event, and to the recognition of the changes which are occurring in the nature of the stressor over time.

The second problem in stress research has been the inconsistent attention given to the importance of mediating factors, or variables that could have a buffering effect upon the stress response. Too often, a simple stimulus-response model seems to be guiding research in this area, and the complexity of the relationships which occur between an event and the individual's response is ignored. Individuals exposed to the same event inevitably respond differently. The explanation for such individual differences lies in considering the impact of various mediators. Some variables that have been identified as important in this capacity are the individual's appraisal of the event (Lazarus, 1980; Lazarus & Launier, 1978), the availability of his social supports (Cassel, 1974; House, 1974; Lowenthal & Chiriboga, 1973; Nuckolls, Cassel, & Kaplan, 1972; Pearlin, Menaghan, Lieberman, & Mullan, 1981), and the use of various coping skills (House, 1974; Jenkins, 1979; Kaplan, 1980; Lazarus, Cohen, Folkman, Kanner, & Schaefer, 1980; Lazarus & Launier, 1978; Pearlin et al., 1981).

Lack of clarity regarding stress responses has also contributed to the confusion in this field. Responses to stressors can occur on three different levels: physiological (the level of 17 hydroxycorticosteroids, for example), psychological (such as depression or anxiety), and sociological (the effect upon the performance of a social role, for example) (Cohen, 1981; Lazarus,

1980; Jenkins, 1979). However, rarely is this distinction made explicit in either individual studies, or in reviews examining sometimes conflicting results. These inconsistencies could partly be attributed to neglect of this point for, as Lazarus rightly contends, coping with a stressor in a certain manner may have one kind of effect on one level, but may exert a very different effect on another.

It is worthwhile to briefly consider differences in the operationalization of stress, since the measurement of a concept has a major bearing upon our understanding of the phenomena. The two basic approaches found in much of the literature in this field view stress in terms of either a life change event (LE) or a perceived stressor.

The LE approach has been, by far, the most popular method of operationalizing stress. Many of the studies utilizing life changes have used either the original or a modified version of the Schedule of Recent Experiences (SRE), a 43 item checklist developed by Holmes and his colleagues (Holmes & Masuda, 1974; Holmes & Rahe, 1967). However, in recent years much criticism has been leveled at this measurement approach on both conceptual and methodological grounds (for reviews, see Cleary, 1980; Cohen, 1979; Dohrenwend & Dohrenwend, 1978; Rabkin & Struening, 1976). Concerns have centered around the following issues: (a) both desirable and undesirable LEs are included in the SRE, but recent studies have demonstrated relationshps only between undesirable LEs and outcomes (for example, see McFarlane, Norman, Streiner, Roy, & Scott, 1980; Sarason,

Johnson, & Siegel, 1978; Suls & Mullen, 1981), (b) LE values or weights are based on predetermined group ratings, but these do not account for differing perceptions and impacts upon individuals, (c) the lack of change may also have negative consequences if a change was expected. Also, chronic stress situations and minor daily problems are excluded from the SRE, (d) "common" LEs included in the SRE may be mostly irrelevant to certain groups, (e) many of the LEs in the SRE could conceivably be presymptomatic manifestations of illnesses, and thus not causes of illness, (f) although many of the early studies reported statistically significant results between LEs and illness, the magnitides of these relationships were very small, such that no practical significance existed, (g) test-retest relationships of the SRE have been low, (h) the outcome variables that were frequently used in studies using the SRE are more accurately measures of care-seeking behavior and not illness per se, (i) many studies did not consider mediating factors that may affect the impact of LEs.

It has become increasingly apparent to researchers in this field that the mere presence of an event cannot be assumed to be stressful, but rather the individual's perception of that situation must be assessed in order to make that conclusion. Thus, for researchers subscribing to this view, events are harmful only if perceived as stressful by the individual.

Lazarus and his colleagues have written extensively about this appraisal process (Lazarus, 1980; Lazarus et al., 1980; Lazarus & Launier, 1978). Primary appraisal is Lazarus' term for the

individual's evaluation of the significance of a particular event. Depending on a variety of factors, the event can be perceived as irrelevant to the person's well-being, benign, or stressful. Occurring simultaneously, and contributing to the individual's evaluation of a particular event, is secondary appraisal. This refers to the individual's assessment of the coping options available to him at the time, and the resources he can draw upon to help him meet the particular demand. This entire process, and hence an individual's perception of a potentially stresful encounter, is not a static, one-time occurrence. Rather, the demands, the coping options, and resources continue to be reappraised as the individual receives feedback from his environment, and continues to reflect upon the situation.

Others have utilized measures of perceived stress and have found them to be better predictors of various outcome variables than scores derived from group ratings. Findings by Sarason, Johnson, and Siegel (1978) illustrate this point. These investigators found life stress scores which assessed both the desirability and extent of the impact of each event upon an individual to be more strongly related to measures of depression and adjustment than scores from the SRE.

From this brief overview it is apparent that from both a theoretical and methodological perspective, the nature of stress research is in the process of change and development. The next sections will focus upon two concepts that are intrinsically involved in furthering our understanding of the stress process: coping and social support.

Coping

Major approaches to conceptualization

As dissatisfaction with a stimulus-response model of stress has grown, interest in the role of coping has concomitantly burgeoned. For the clinician, this is a welcomed change of emphasis, since it implies a shift in focus from the view that stressors inherent in daily living can be eliminated, toward what an individual can do to mitigate the negative effects of potential stressors. Indeed, much of nursing's efforts have been directed toward this aspect of the stress process, as will be discussed later.

Currently, there are three major approaches to the conceptualization and measurement of coping. The following discussion of these approaches will be based primarily upon the detailed critique by Folkman and Lazarus (1980). Coping has been viewed as consisting of defensive or ego processes versus as a multidimensional construct. Haan's theoretical framework is an example of a model which views coping as one of several ego processes (Haan, 1977). Others, in their operationalization of coping, restrict their assessments to the classical defense mechanisms (for example, see Wilson, 1982). One problem with this approach has had to do with the evaluation of the ego processes. Often there has been a confound between the coping process itself and the adaptational outcome. Another difficulty has been inadequate interrater reliabilities in the labelling of ego processes. Haan, herself, reports low interrater reliabilities (between .45 to .65) in her studies looking at the development of ego processes from childhood to

adulthood (Haan, 1977). A final problem concerns the primary focus upon tension reduction in models that treat coping solely as a set of defenses. This ignores the concomitant coping function of problem-solving.

Many investigators in the stress field now recognize the importance of assessing these dual functions of coping when evaluating an individual's responses to any stressful situation (Caplan, 1981; Kaplan, 1980; Lazarus, 1980; McGrath, 1970; Pearlin & Schooler, 1978). Lazarus and his colleagues (Cohen & Lazarus, 1979; Lazarus, 1980; Lazarus & Launier, 1978) have added yet another dimension to consider beyond the problem- and emotion-focused distinction. They have identified four major modes of coping, each of which can be focused toward either problem-solving or the management of tension. They are: direct actions, information-seeking, intrapsychic processes, and inhibition of actions. They have also suggested that the addition of a fifth mode of coping might be appropriate based upon its importance in several recent studies, that is, turning to others for help and succor (Cohen & Lazarus, 1979). It is self-evident that approaches focusing upon coping as defensive or ego processes consider only a very limited aspect of the multidimensionality of coping and, in this sense, are unduly restrictive.

Coping has also been viewed from the perspective of a personality trait or disposition versus a process approach. Some personality traits that have been examined include sensitizing versus avoidance (Goldstein, 1973), monitoring versus blunting (Miller, 1980), and

repression versus sensitization (Byrne, 1961), all three of which refer generally to an individual's propensity to scan the environment for information regarding a stressful event. Those that adhere to a dispositional approach make the assumption that individuals are consistent in their responses to stressors no matter what the context. However, many challenge this view, emphasizing the importance of situational variables in contributing to differences in stress responses (McGrath, 1970; Moos, 1974). Empirical evidence also indicates that the trait approach to coping has had very limited success in predicting an individual's behavior in actual situations (Sandler & Lakey, 1982; for reviews of such studies, see Cohen & Lazaus, 1979; Lazarus et al., 1974; Moos, 1974). Folkman & Lazarus point out two additional problems with this approach. First, since the traits which are measured are unidimensional, the other aspects of the coping process described above are ignored. Second, since coping is conceptualized as consistent across situations and, therefore, static, the changes in coping strategies that occur over time are overlooked. If we refer back to the description of the role of reappraisal in the stress process, we are reminded that there are continuing shifts in thoughts and behaviors based upon feedback from the environment and an individual's own reflections about the situation. Neglect of this time factor may contribute to problems in reconciling conflicting results in coping studies (for example, see a review on coping with illness by Cohen & Lazarus, 1979). Major proponents of a process approach to coping are Lazarus and his colleagues. In this model, an attempt is made to assess what an

individual actually thinks or does in response to a situation perceived as stressful, and the mode of coping is then inferred from these data (Folkman & Lazarus, 1980).

Coping has also been approached within the context of a special or unusual situation versus a normative approach. In the former, coping responses peculiar to that single situation are described. An example of this approach is McCubbin's work describing coping used by wives whose husbands have been either missing in action or prisoners of war (McCubbin, Dahl, Lester, Benson, & Robertson, 1976). While these approaches are typically more comprehensive in the sense that the assessments are not confined to defenses or traits alone, a limitation of these studies is that results are often situation-specific, and therefore, not generalizable to other contexts.

A normative approach to coping has been attempted by both Pearlin and Schooler (1978) and Folkman and Lazarus (1980). While the operationalization of coping differed in these studies, the central purpose of both was upon describing coping responses to commonly-experienced life stressors, hence the term "normative." Findings indicated that a great variety of coping strategies were used by both samples in response to stressors.

While these three broad approaches to coping can be found in the literature, there currently exists no widely acceptable categorization of coping. Obviously, this is a necessary step if significant progress is to be made in this field. Lazarus points out that any good classification scheme of coping needs to provide (a) a detailed itemization of various coping subtypes that make up major

classification categories, and (b) a full analysis of the process, antecedent conditions, and consequences of each type of coping (Lazarus et al., 1974). Although he and his colleagues are making major efforts in this direction, it would be precipitous at this point to suggest that the model that they have outlined thus far meets these criteria.

Antecedent conditions necessary to a classification scheme

Some general antecedent conditions which need to be incorporated into any classification scheme of coping include: the characteristics of the stressor situation itself, an individual's access to various environmental resources, and personal characteristics.

While the importance of delineating the nature of the stressor situation in the stress process was mentioned earlier, some empirical examples could serve to highlight the impact of this factor upon the choice of coping. Both normative studies of coping referred to above examined the effects of situational factors upon the type of coping utilized and found that different strategies were preferred in dealing with different stressors (Folkman & Lazarus, 1980; Pearlin & Schooler, 1978). Furthermore, Pearlin and Schooler discovered that the extent of the impact that coping had upon measures of distress differed, depending upon which area of life strain was examined. Others have looked, not at different groups of stressors, but rather at different characteristics of stressors and have also noticed

differential effects upon choice of coping. For example, Miller (1980) reviewed several studies whose results indicate that a high degree of invasiveness or intensity of a stressor will adversely affect the individual's ability to use distraction as a coping response. Still others have suggested that if a situation cannot be changed, and must be endured or tolerated, an individual is more likely to use emotion-focused rather than problem-focused coping (Folkman & Lazarus, 1980). Thus, an awareness of different characteristics of the stressor situation can contribute to a better understanding of the role of coping in the stress process.

Another group of antecedent conditions is the individual's access to a variety of environmental resources which could be used to enhance his coping efforts. The importance of an individual's social network and the social supports it provides is recognized by many to be a salient coping resource (Cohen, 1979; Hirsch, 1981; Lazarus & Launier, 1978; McCubbin, 1979; Mechanic, 1977). The effect of other sociocultural resources upon coping is also being given growing attention in the literature (Caplan, 1981; Lee & Newton, 1981). For example, Kaplan (1980) has spoken about the importance of "patterned mechanisms" found on a societal level which could greatly affect an individual's ability to deal with certain stressors and decrease their associated distress. Others have suggested that lack of economic and educational resources may restrict access to more effective coping responses (Pearlin & Schooler, 1978). There are a host of other environmental resources which may affect an individual's coping which have not been mentioned here. It will be

important for future investigations to consider this group of variables in research designs in order to improve our understanding of coping and its effects.

Finally, a third group of antecedent conditions to be considered in a classification of coping are different personal characteristics of the individual. One such characteristic which may have contributed to conflicting results found in intervention studies focusing upon psychological preparation is the individual's tendency to prefer certain coping strategies over others (Cohen & Lazarus, 1979). For example one intervention study took this tendency into account and found that the outcome measure of physiological arousal was reduced when the level of preparatory information was consistent with the individual's coping preference (Miller, 1980). An individual's sense of perceived or actual control over a situation is another characteristic considered by many to be important in the understanding of coping (Gal & Lazarus, 1975; Hill, 1982; McFarlane et al., 1980; Rodin, 1980; Sandler & Lakey, 1982).

Consequences of coping

As Lazarus and colleagues have pointed out, an understanding of the consequences of coping is an intrinsic part of any adequate classification scheme. However, one of the difficulties in this area of research is how to determine just what constitutes effective or ineffective coping (Lazarus, 1980). As mentioned earlier, it is important to recognize that the effect or outcome of coping can be measured on three different levels: physiological, psychological,

and social. Salient information about a particular coping strategy may be lost if only one of these levels is assessed since it may produce "positive" results on one level, and yet "negative" results on another. Consider, as a hypothetical example, a new adolescent mother who has channeled her talents and emotional energy into developing a positive maternal-infant relationship, but has done so at the expense of her own continued psychosocial development. Yet another example is the person who successfully denies the existence of harmful physical symptoms and achieves psychological comfort at the expense of exacerbating an underlying disease process. Another issue to be considered here is, at what point in time should coping effectiveness be measured? The issue of short- versus long-term effectiveness has not been considered in many studies (Cohen & Lazarus, 1979; McGrath, 1970), and yet it is quite likely that a particular strategy which may have satisfactory results in the short-run, may actually have very different effects on a long-term basis.

Measurement of coping

While some of this information was implicit in the description of the three major approaches to coping presented earlier, it may be worthwhile to consider some additional issues at this point. Moos (1974) has written an extensive review of the various measures assessing what he terms "adaptive behavior", part of which includes coping. Basically, measurement approaches in this field scan a broad array of techniques, including: observations, interviews, family interactions, tape recordings and films, essay and sentence

completion techniques, story completions, and a variety of objective techniques. Based on this review, Moos sees a need to compare the efficacy of various alternatives to the assessment process, considering the particular conditions under which it would be more advantageous to use one method over another. This issue has been alluded to by others as well. For instance, the decision over whether to use self-reports, observations, or a combination of both has been raised by Lazarus in relation to the difficulty in getting information about defensive coping mechanisms (Lazarus, 1980; Lazarus et al., 1974). A similar measurement issue has been raised by Pearlin and Schooler (1978) in their description of the difficulties in identifying concrete coping behaviors which manage emotions, since the same behaviors could be carried out for other reasons as well.

A second, and related, point raised by Moos (1974) is the unlikelihood that any single test or measure could comprehensively assess a complex theoretical construct such as coping. Reviewing the results of several studies, Moos pointed out the low intercorrelations between tools purportedly measuring the same construct. Thus, it is likely that a combination of techniques supplementing each other may be needed to gather comprehensive information about any individual's coping under different conditions.

Clinical research related to coping

Having briefly outlined some of the major issues in the research on coping, an overview of the clinical research being carried out in this area will be presented (for a more extensive review, see Cohen &

Lazarus, 1979). Research has been concerned with describing the kind of coping used by certain groups of individuals or patients, relating the kind of coping used by different groups of patients with different outcome measures, and actually attempting to intervene to change coping strategies in various medical settings and determine the effects upon outcomes. Nursing has been involved with studies of all these types, and these results will be incorporated into this section.

While many of the early studies on coping were entirely descriptive, and suggested how various strategies used in response to a particular illness may contribute to psychological adjustment (Cohen & Lazarus, 1979), current studies still maintain this focus. For example, recent research has outlined the coping strategies used by such groups as: wives needing to deal with various lengths and types of separations from their husbands (McCubbin, 1979; McCubbin et al. 1976); hemodialysis patients (Baldtree, Murphy, & Powers, 1982); patients seeking acute care at an emergency department (Jalowiec & Powers, 1981); and hypertensive patients (Jalowiec & Powers, 1981).

Recent clinical studies looking at the relationship between coping and various outcome measures have found relationships between such variables as: the use of certain cognitive coping strategies and subsequent psychosocial adjustment in a small group of recently discharged spinal-cord injured patients (Rosenstiel & Roth, 1981); the use of either denial or compliance to a medical regime and subsequent chance of rehospitalization or death in a group of ischemic heart disease patients (Prince, Frasure-Smith, Rolicz-

Woloszyk, 1982); and an aggressive coping style and various subjective and objective outcome measures in a group of surgical patients (Wilson, 1982).

A sizeable portion of the current research in this area has been devoted to determining the effects of various interventions designed to alter or enhance an individual's coping efforts. An intervention approach used in many nursing studies has been based upon the notion of psychological preparation, first introduced by Janis (1953). Based upon his work with surgical patients, Janis hypothesized that preparing an individual prior to a stressful situation such as surgery will stimulate the "work of worrying." That is, information about potentially disturbing perceptions the individual is likely to encounter may stimulate mental rehearsal which can contribute to the development of effective reassuring cognitions, as well as correct unwarranted anticipations or beliefs. In clinical studies, the type of information provided prior to the stressful event (usually surgery) has focused either upon details about what to expect about the events during and after the procedure itself, or upon sensations the patient is likely to experience. Many of the recent studies have attempted to determine the differential effects of each of these types of preparatory information upon various psychological and physiological measures (Hartfield, Cason, & Cason, 1982; Johnson, Rice, Fuller, & Endress, 1978). Results of these and other studies seem to indicate that the provision of information which emphasizes the likely sensations an individual may experience is more beneficial than information about events, and indeed, the clinical nursing

literature already contains recommendations to this effect (McHugh, Christman, & Johnson, 1981).

The second major focus of much of the clinical research in this area has been upon instructions in specific coping strategies. In the field of psychiatry, cognitive behavioral therapists have been concerned with training their clients in the use of various cognitive coping skills. Roskies and Lazarus (1980) who reviewed this body of research, concluded that such training has met with success in a variety of problem areas.

In other clinical arenas, intervention studies have included both preparatory information and instruction or rehearsal in coping strategies in their experimental conditions, but have not attempted to differentiate between their possible separate effects (Visintainer & Wolfer, 1975; Wolfer & Visintainer, 1975, 1979). However, others have separated out these two components in an effort to determine if either one alone, or both in combination, are superior in terms of their effects upon various outcomes (Hill, 1982; Johnson et al., 1978; Langer, Janis, & Wolfer, 1975). Two different types of coping instructions can be found in such studies: those that instruct patients in the use of specific direct action coping strategies, and those that train patients to use specific cognitive coping strategies. An example of training in cognitive coping is found in Rodin's work with a group of elderly in an intermediate care facility (Rodin, 1980). The experimental group focused upon training subjects in coping skills using cognitive strategies which emphasized a view of personal control. The experimental group subsequently did

significantly better upon various outcome measures including: active participation in the milieu, staff ratings of patient adjustment, measures of perceived stress, and long-term cortisol levels. An example of a study using instructions in direct action coping strategies was conducted by Hill (1982). A group of cataract patients were randomly assigned to one of four groups, one of which included behavioral rehearsals about how to decrease discomfort in the post-operative eye, and various self-care skills. The only group which did significantly better on any of the outcome variables was the group receiving both behavioral instructions as well as preparatory sensory information. These patients had a shorter length of time before first venturing from home after discharge. No other differences were found on the other subjective or objective outcomes assessed for any of the experimental groups.

While the overall results of these intervention studies have generally supported the notion that preparatory information and instruction or rehearsal in coping can have positive effects upon clinical outcomes, conflicting results are still found in the literature and may be due to an inadequate conceptualization of the stress process. Many of the current intervention studies neglect variables which may interact with the experimental condition. An individual's personal characteristics, as mentioned earlier, comprise one group of such variables. Indeed, in studies designed to explore this type of interaction, subjects whose preference for a particular coping strategy was congruent with the type of preparatory information received did better on postsurgical outcome measures

(Goldstein, 1973; Miller, 1980). Intervention designs rarely take into account other antecedent conditions which may differentially affect coping outcomes, such as various individual or environmental resources. Differences in the stressor situation itself could account for conflicting results. While many of the studies are concerned with surgery, different types of operative procedures vary in the degree of threat and problems in adjustment that they present. Finally, as mentioned in an earlier section, the mediating effect of an individual's appraisal of the potential stressor must also be considered when attempting to explain differences in adaptational outcomes.

Social support

The role of social support in the stress process has been given considerable attention in the empirical literature recently (for reviews, see Cobb, 1976; Dean & Lin, 1977; Hamburg & Killilea, 1979; House, 1974; Kaplan, Cassel, and Gore, 1977). A comprehensive review by Cobb (1976) indicates that adequate social support may protect those in crisis from a wide variety of pathology, including low birth weight, arthritis, tuberculosis, depression, alcoholism, the "social breakdown syndrome", and even death. However, while an overwhelming number of studies generally indicates that adequate social support is related to a more beneficial stress response, research in this area is plagued by a variety of problems on both conceptual and operational levels, leading to results which are sometimes conflicting and difficult to interpret. Several of these problems

can be grouped into three major areas: those concerning the nature of social support; the context within which social support exits; and the effects of social support.

Nature of social support

Two issues will be reviewed here: social support as a multidimensional construct, and social support viewed in subjective versus objective terms.

The multidimensionality of social support is recognized by most experts in the field, and yet there is less agreement about just what are its essential components. A comparison of social support definitions by major theorists in the area is illustrative (Kahn, 1976, p. 17):

> Cobb: "information leading the subject to believe that he is cared for and loved, esteemed and a member of a network of mutual obligations."
>
> Kahn: "an interpersonal transaction that consists of the expression of positive affect toward another person, the affirmation or endorsement of certain behaviors or attributes of another person, or the giving of material or symbolic aid to the other person."
>
> Mechanic: identified the social support dimensions of "nurturance, empathy, encouragement, information (evaluation, attribution), sharedness (of common experience), instrumental material, and recognition of competence."
>
> Weiss: identified the conditions of social support as "attachment (to supporting others), social integration (in the larger community structure), reassurance of personal worth, alliance, and opportunity to receive nurturance."

A consistent area of agreement is the importance of positive affect or emotional support. Most major theorists agree that the communication of a sense of warmth, caring and love is essential to

the construct of social support.

Another component which is found with some variation in each definition is the affirmation or social reinforcement of certain behaviors or attributes (similarities are esteem support, recognition of competence, and reassurance of personal worth). Thus, not only is caring important, but also is the communication that actions and skills are valued and reflect the individual's competence in a social role.

A third component that is usually found in major definitions of social support is that which refers to a sense of belonging to a network of mutual obligations (similarities in the above definitions include sharedness and social integration). One is supported if one feels a sense of community or belongingness which entails mutual expectations in time of need.

However, disagreement exists regarding other aspects of social support. For example, instrumental or tangible assistance as an aspect of social support is accepted by some (see Kahn's and Mechanic's definitions above), but rejected by others (Cobb, 1976). Disagreements regarding the essential components of social support, and a neglect of its multidimensional nature in many operationalizations of this construct, have contributed to difficulties in interpreting conflicting study results. This aspect of the nature of social support is essential to recognize since it is probable that different types of support will have differential effects under various conditions (Kahn, 1976). For example, in Hirsch's (1980) study of women undergoing major life changes,

satisfaction with cognitive guidance was related to less psychiatric symptomatology and better mood, while satisfaction with socializing experiences was correlated with higher self-esteem. No other dimension of social support measured in that study (i.e., social reinforcement, tangible assistance, or emotional support) was related to any mental health variable.

Another area of disagreement concerning the nature of social support involves whether or not it should be defined in subjective or objective terms (Kahn, 1976). Is the subject's perceptions of the availability and adequacy of different dimensions of social support the important feature, or is the objective provision of such support salient? In the empirical literature, measures of both are found. For example, some researchers have evaluated the perceived helpfulness of a transaction (Hirsch, 1980; McFarlane et al., 1980), while others have evaluated whether or not a particular type of assistance was received, but not how its helpfulness or adequacy was viewed by the recipient (Furstenberg & Crawford, 1978; Polansky, Chalmers, Buttenwieser, & Williams, 1979). Results of these two types of studies are difficult to compare since social support is conceptualized, and hence measured, differently. Clarification of the relative importance of objective versus subjective perspectives of social support could be achieved if measures of both were included in research designs.

Context of social support

Several aspects of this area will be reviewed here: the

characteristics of an individual's social network; the nature of the stressful situation; the sources of social support; the timing of social support; and the individual's personal characteristics.

The provision of social support occurs within an individual's social network, and it has been suggested that certain characteristics of the network itself may affect the type of social supports available to its members (Kahn, 1978; Walker, MacBride, & Vachon, 1977). Network characteristics which seem to be most salient to the provision of social support are the following (Mitchell, 1969; Walker et al., 1977): (a) density - the extent to which members in an individual's network know one another, (b) reachability - the extent to which an individual can use his relationships to contact people who are important to him, (c) size - the actual number of people with whom an individual maintains contact, (d) strength of ties - a combination of such characteristics as the amount of time, the emotional intensity, the intimacy, and reciprocal services characterizing the tie, (e) homogeneity of membership - the extent to which members share social attributes, as well as attitudinal and behavioral characteristics. More researchers are including measures of both network characteristics and social support and exploring the relation of each to outcome variables (for example, see Billings & Moos, 1981; Cooley & Keesey, 1981; Finlayson, 1976; Holahan & Moos, 1981; McFarlane et al., 1980; Wilcox, 1981). However, few have examined the network conditions under which various types of social support are best provided (for an exception, see Hirsch, 1980).

Another variable relevant to the context in which social support

is provided is the nature of the stressful situation itself. That is, different types of stressful transactions may dictate a need for certain kinds of aid or support. Weiss (1976) has suggested that crises, transition states, and deficit situations may each require different kinds of social supports. For example, he suggests that an individual in crisis is most likely to benefit from interactions conveying understanding and acceptance. On the other hand, an individual undergoing a transition may best profit from various types of cognitive assistance because of the confusion and unpreparedness which are so common to those experiencing these types of situations. Finally, someone who is in a deficit situation may be most in need of an ongoing, problem-focused support system. Whether these hypotheses are accurate remains a subject for future research. Yet, investigators must be mindful of this type of classification since certain dimensions of social support may exert an effect only in particular situations (Dean & Lin, 1977; Kaplan, Cassel, & Gore, 1977).

Research in this area often overlooks the various sources who provide social support. Weiss (1974) suggests that different types of relationships become specialized in the types of provisions they offer an individual. If this is the case, then evaluating the social support offered by, for example, only family members or only a spouse, may mask a relationship that exists between other sources of social support and an outcome measure. Indeed, when this variable has been considered in research designs, differential relationships between various sources of social support and outcomes have been

discovered. For example, one study (Dimond, 1979) examined the relationship between various sources of social support (family, spouse, and confidante) and psychosocial adaptation (morale and changes in social functioning) in a group of patients on maintenance hemodialysis. While measures of support provided by the patients' family and spouse were significantly related to morale, only a family support measure was related to changes in social functioning. No significant relationship was found for the confidante source. In another study (Berkman & Syme, 1979), age and sex-specific mortality rates were examined over a nine year period in a large random sample of residents in Alameda County. While subjects with social ties with any of four sources (i.e., marriage, close friends and relatives, church membership, informal and formal group associations) had lower mortality rates than those lacking these ties, the two sources of marriage and close friends/relatives were stronger predictors.

Timing is also important to understanding the context of social support. Throughout the course of a stressful situation an individual's needs may change, and thus may create a demand for support that is different than what was needed at the onset of the situation (Walker et al., 1977). This process is overlooked in research designs that utilize a single, cross-sectional evaluation (Carveth & Gottlieb, 1979). Misleading and contradictory results can arise from these types of designs, especially when comparisons are based upon assessments drawn from different phases in the progression of a stressful event.

Different characteristics of the individual are also involved in

the context within which social support is provided and received. Locus of control is one such characteristic which may exert a conditional status upon the effects of social support. For example, in keeping with their hypothesis that individuals with an internal locus of control are more apt to utilize social support in coping with stressors than are externals, Sandler and Lakey (1982) found that social support buffered the effect of life event stressors upon anxiety and depression only for internals, but not for externals. Another individual characteristic considered in social support research is the individual's receptivity to the assistance offered. In comparing psychiatric and medical patients, Tolsdorf (1976) discovered that the psychiatric patients in his sample had a "negative network orientation." That is, they believed it was inadvisable or useless to draw upon network resources. When family members did offer advice, support, or feedback, these subjects kept the interactions on a superficial level and would not divulge enough of themselves to enable family to assist them. When assistance was provided, it was unsolicited and, in the case of advice, usually ignored. Unfortunately, it is the exception rather than the rule, to include measures of this kind in studies concerned with social support.

Effects of social support

The two prominent issues related to this area concern the type of effect social support exerts and its mechanisms of action. Social support has alternately been described as having a direct or main

effect upon some outcome variable, versus having a buffering or interaction effect. When social support is conceptualized as the former, i.e., an independent variable, some dimension of support may be viewed as lacking, relationships with network members may be viewed as stressors, or aspects of social support may be seen as having direct positive effects upon an outcome variable (Berkman & Syme, 1979; Caplan, 1974; Crnic et al., 1981). In contrast, when social support is conceptualized as an intervening variable, it is thought to exert an effect only in the presence of a stressor, thus acting to buffer potentially harmful effects (Cassel, 1974; Cobb, 1976; Dean & Lin, 1977; Kaplan et al., 1977). Empirical support for both of these views can be found in the literature. For example, Henderson (1981) hypothesized that a deficiency in either attachment or social integration (two dimensions of social support) are causal factors in the onset of neuroses, independent of the presence of adversity. Using a prospective, longitudinal design with a sample from a general population survey in Canberra, Australia, he found that, contrary to predictions, a deficiency in social relations was more strongly associated with subsequent neurotic symptoms if there was also high adversity. However, a study by Pinneau (1976) which examined the relationship of tangible and psychological-emotional support in a large group of workers found no evidence for a buffering effect between stressors and either physiological or psychological strain. This finding was also contrary to the investigator's original hypothesis. However, evidence was found for the hypothesis that social support would be directly related to low levels of

psychological strains. Other studies either supporting (Nuckolls et al., 1972; Wilcox, 1981) or refuting (Andrews, Tennant, Hewson, & Vaillant, 1978) the buffering hypothesis can, of course, be found. It is somewhat redundant, at this point, to state that a good part of this confusion stems from differences in operationalizing the construct of social support, and a neglect of various contextual factors which are likely to render the effects of social support operative only under certain conditions. Therefore, the salient question to be addressed in future research is under what conditions is either a direct or indirect effect of which dimension of social support likely to be found?

Finally, minimal efforts have been directed toward exploring the mechanisms by which social support exerts its infuence. Some types of support may directly influence the potential stressor itself, thereby mitigating its impact upon the individual. Recently, many investigators have pointed to the role that this construct plays in the coping process, and suggest that it is through its value as an important coping resource that social support may exert its effects (Caplan, 1981; Hirsch, 1981; McFarlane et al., 1980). Hamburg and Killilea (1979) have expanded on this notion and suggest that social support may influence coping strategies on three different levels.

The first is affective or emotional. Many individuals confronted with stressors seek out comfort, and the emotional support which their network provides can minimize or alleviate feelings of distress. The acceptance of feelings and conveyance of a sense of caring can also contribute to the person's sense of worth and well-

being.

The second level is cognitive. The individual confronted with a stressor that has exceeded his adaptive resources will eventually need to acquire new information and/or skills if he is to cope effectively. Network members can offer assistance with problem-solving, and provide the individual with potential role models whose past behavior in similar experiences can be adopted.

The third level the authors describe is instrumental. The network can mobilize tangible services or aids to concretely assist the individual. This can help minimize the demands of the stressor directly, or can increase the individual's resources for coping with them.

Very few studies have explored the relationship between social support and the use of different coping strategies. Two exceptions will be briefly described here. In their work with a random sample of 194 families from San Francisco, Billings and Moos (1981) looked at the relationships between subjects' recent life events, coping and social resources. Part of their results indicated that subjects who used avoidance coping, as opposed to either active-cognitive or active behavioral strategies, also tended to have fewer social resources. In Tolsdorf's (1976) research exploring the differences between the social networks of psychiatric and medical patients, the differential use of "network mobilization" was found to be a major discriminating factor between the two groups. This is a type of coping mechanism used by the medical patients, and yet by none of the psychiatric patients, whereby the person sought out network members

for support, advice, and feedback if individual coping mechanisms proved ineffective in overcoming the stressful situation surrounding hospitalization. Thus, a relatively inactive support network was mobilized by certain individuals to assist in the coping process.

Measurement of social support

While many of the problems in the conceptualization of social support have major implications for the operationalization and measurement of the construct (Thoits, 1982), some issues particular to measurement deserve further mention. While there is an abundance of instruments purporting to measure some aspect of social support, very few investigators have actually spent time developing the validity or reliabiity of their tools (for exceptions, see Brandt & Weinert, 1981; Henderson, Duncan-Jones, Byrne, & Scott, 1980; Hirsch, 1980; Lin, Dean, & Ensel, 1981; McFarlane et al., 1981; Norbeck, Lindsey, & Carrieri, 1981). The importance of this type of research is evident. As part of this process, a few investigators have attempted to demonstrate that their instruments were free of certain aspects of response bias (McFarlane et al., 1981; Norbeck et al., 1981). In particular, the concern was that the subjects' responses may reflect what they felt to be socially desirable rather than what was actually the case. This is an important issue for other researchers involved in instrument development to address.

The actual format of different indicators of social support vary, including the use of detailed interviews (Henderson et al., 1980), questionnaires (Brandt & Weinert, 1981; Norbeck et al., 1981), self-

report logs (Hirsch, 1980), and single-item measures (Lowenthal & Haven, 1968). The adequacy of single-item measures to accurately reflect even a part of the domain of such a complex construct is questionable (Moos, 1974) and, indeed, some studies which have utilized this as a measure of social support have not produced expected results (Dimond, 1979). The interview method was chosen over the use of a questionnaire by one group of investigators (Henderson et al., 1980) because it was thought that subjects would tend to give more thoughtful responses if approached in this way. While this might be the case, the choice of this technique must be weighed against the problems of additional time spent in data collection as well as the added difficulties in inference. To this writer's knowledge, there have been no attempts to empirically explore the efficacy of one method of measurement over another in this area, nor to identify how to complement different techniques in an effort to better sample the domain of interest.

Another issue related to the operationalization of social support has to do with whether the actual use of some dimension of support is measured, or whether its potential use is measured. Differences in this aspect of measurement have to do with ambiguity on a conceptual level. It is unclear whether the actual mobilizaton of support is what exerts a protective influence in the stress process, or whether the sense that an individual could call on network members if necessary is what is important. Measures of actual support (Lowenthal & Haven, 1968; Sandler & Lakey, 1982) as well as potential support (Andrews et al., 1978; Wilcox, 1981) have each yielded

expected results under certain circumstances.

Adolescent Development and the Stress Process

A personal characteristic that is a major mediator in any stress study concerning adolescents is psychosocial development. The key issue that will be addressed here is how different developmental factors may affect adolescents' responses to potentially stressful experiences. Unfortunately, very little theoretical or empirical work exists which deals directly with this issue. However, there is some evidence that the stress process in an adolescent may be mediated by his degree of development relating to: egocentric thought, problem-solving abilities, and defensive processes.

Elkind's 1967 description of egocentrism was primarily responsible for generating the current interest in this construct among researchers concerned with adolescents (Adams & Jones, 1982; Chandler, 1973; Looft, 1971; Muuss, 1982). Within a Piagetian framework, egocentrism broadly refers to a lack of differentiation in some area of subject-object interaction. During adolescence, there is an increasing ability to conceptualize the thoughts of others, but a concomitant cognitive limitation arises from this new achievement. As Elkind explains , the adolescent's emerging egocentrism renders him unable to differentiate between the objects of others' thoughts, and his own objects of concern. Thus, the adolescent assumes that others are as preoccupied with his behavior and appearance as he, himself, is and consequently spends a great deal of energy anticipating the reactions of an "imaginary audience." The presence

of this heightened sense of self-consciousness during adolescence has, indeed, received empirical support in the literature (Adams & Jones, 1981; Elkind & Bowen, 1979; Enright, Lapsley, & Shukla, 1979).

This construct may have an effect upon an adolescent's response to certain types of potential stressors by affecting his appraisal of the situation. In fact, egocentrism may exert an influence upon the adolescent's ability to deal with psychosocial transitions in particular. As described previously, a transition state is characterized by major changes on both personal and relational levels which require the individual to deal with problems for which he is basically unprepared (Weiss, 1976). To the extent that egocentric thought is operating, an adolescent may experience a heightened sense of self-consciousness when attempting to carry out some of the unfamiliar responsibilities brought about by these changes. This exaggerated concern that the imaginary audience is scrutinizing and evaluating his developing abilities and behaviors may adversely affect the adolescent's responses to the situation by intensifying his subjective sense of distress and discomfort. Since this construct has not been assessed in studies which have explored adolescents' reactions to various stressors, there are no data which can shed light on the validity of this hypothesis.

The second facet of an adolescent's psychosocial development which may play a mediating role in the stress process is the individual's problem-solving abilities (Rutter, 1981). To the extent that these skills are developed, problem-focused coping should be enhanced. Throughout adolescence, major changes occur which

contribute to the adolescent's adeptness in this area. For example, data from a variety of sources indicate that the adolescent becomes increasingly sophisticated in being able to use abstractions, making interpersonal inferences, planning ahead, and taking the role or perspective of others (Hill & Palmquist, 1979; Keating, 1980; Neimark, 1975; Shantz, 1975). Spivack and colleagues have also suggested that in the interpersonal domain , the following cognitive problem-solving skills may play a major role during adolescence: conceptualizing the means of moving toward solutions or goals; generating options or alternatives; and spontaneously conceptualizing the consequences to oneself and others prior to taking actions (Spivack, Platt, & Shure, 1976). While these investigators present some indirect evidence for the major development of these skills during adolescence, very little empirical work currently exists which directly tests the accuracy of these hypotheses. Nevertheless, it is evident that as the individual moves from middle childhood through the adolescent years, he begins to add a variety of abilities to his repertoire which enable him to generate a broader array of more effective strategies that he can use in coping with his everyday problems.

The third area which is thought to undergo developmental changes throughout adolescence and early adulthood relates to the individual's defensive processes. Since the use of defense mechanisms plays such a significant role in the regulation of anxiety and other distressing affective states, changes in the kinds of defenses which are available to the adolescent are likely to have an

impact upon the emotion-focused coping strategies he uses in stressful situations. More than three decades ago, Anna Freud (1946) described the emergence of the use of intellectualization during adolescence. Because of the expanding cognitive capacities during this stage of life, the adolescent begins to have the capabilities necessary to employ this particular defense. However, although some investigators still maintain that intellectualization is a common defense mechanism seen in the adolescents of today (Hofmann, 1975), others have found that its purported prevalence among American youth has been overrated (Blos, 1962; Offer, 1969).

Empirical work which has contrasted the types of defenses most commonly used at various stages in development indicate that some differences do, indeed, exist. For example, Haan (1977) found that preadolescents had less tolerance for ambiguity, were less likely to transform or restrain feelings, and more often used rationalization and regression when compared to an early adult group. In a 30 year longitudinal study, Vaillant found that as adolescents, subjects were twice as likely to use "immature" defenses (i.e., acting out, fantasy, passive/aggressiveness, hypochondriasis, and projection) as "mature" ones (i.e., suppression, altruism, sublimation, and anticipation) (Newman, 1979). However, as young adults, subjects were twice as likely to use mature defenses, and in mid-life, subjects were four times as likely to use mature defenses. It seems that while developmental changes may, indeed, affect the defensive processes, empirical work is still needed to determine changes in the capacity to employ different defenses during adolescence, as well as

changes in the preferred use of different processes during this time. Both of these issues will have implications for the adolescent's coping with the unpleasant emotions engendered by a stressor event.

While little has been done to explore the relationship between developmental factors and the stress process, neither has much effort been directed toward simply characterizing the coping strategies commonly used by adolescents in response to stressful situations. Some exceptions are those few studies which provide descriptions of adolescents' coping with both normative life situations and specific problem situations.

Norman (1979) reviewed four recently completed longitudinal studies concerned with coping and adaptation during adolescence. Almost all of the subjects in these studies were males. Two assessed coping in terms of dispositions or traits, describing coping broadly in terms of the degree of social exploration the adolescent displayed, or in terms of the adolescent's openness to new sensory experiences. The problems with this type of approach to coping have been outlined in a previous section. Vaillant's study, mentioned earlier, focused on changes in intrapsychic defenses from adolescence through middle age. Again, the limitations of restricting the assessment of coping to the ego processes alone have already been described. The fourth, an eight year longitudinal study by Bachman, O'Malley, and Johnston (1978), examined a broad array of attitudes, aspirations, and background characteristics of tenth grade students which were later predictive of educational and occupational achievement. This study was more concerned with factors contributing

to specific areas of adaptation rather than with coping processes per se.

In Offer's study of "modal" adolescent males (Offer, 1969), assessments of coping revealed that subjects evidenced goal-directed behaviors to deal with environmental situations, although detailed descriptions of these behaviors were not provided. Sublimation, denial, and repression were often used to deal with aggressive and sexual impulses. These adolescents also displayed a capacity for self-observation, and often used humor as a vehicle of self-criticism or in response to anxiety.

Some investigations have focused upon the adolescent's coping responses to specific problem situations. Examples include coping with: college decisions (Silber, Coelho, Murphey, Hamburg, Pearlin, & Rosenberg, 1961); freshman year at college (Coelho, Hamburg, & Murphey, 1963); chronic hemodialysis (De-Nour, 1979); and cerebral palsy (Minde, 1978). These descriptions, while valuable to researchers interested in the particular problem area, often tended to be situation-specific and therefore not very useful in terms of generalizing to other problems.

The final area related to adolescence and the stress process has to do with the importance of social support as a major coping resource for this age group. Because many skills and abilities are still in the process of developing, the adolescent who is faced with a potentially stressful situation may not yet have the personal resources required to effectively deal with the problem or the concomitant anxieties it may engender. Thus, he is apt to be

particularly dependent upon those in his social network to provide him with the supports necessary to bolster his coping efforts. The literature suggests that various sources of social support are particularly important to adolescents in new learning environments such as junior high school or college, and in making posthigh school plans (Coelho et al., 1963; Gottlieb, 1975; Hamburg, 1974; Silber et al., 1961). However, we still know very little about the sources and types of social support adolescents find useful when faced with other stressful events.

Adolescent Mothering and the Stress Process

The issue of adolescent mothering is well-suited for study within the framework of the stress process because of the relevance of the model's major components in understanding this potentially stressful life event. Even an adult's transition to parenthood can be stressful, triggering a host of problems with which one must cope (Bennett, 1981; Donaldson, 1981; Hobbs & Cole, 1976; Larsen, 1966; Leifer, 1977; Miller & Sollie, 1980; Rossi, 1968; Russell, 1974; Weinberg & Richardson, 1981). For the adolescent, however, this transition may be more problematic than for her adult counterpart. The adolescent who becomes a mother is experiencing an accelerated or premature role transition (Russell, 1980). According to this perspective, additional distress is associated with any variance from socially expected norms. Thus, the teen's early transition to parenthood may be particularly stressful because she must cope, not only with major life changes accompanying motherhood, but also with

the normal developmental tasks of adolescence, i.e., identity formation, intimacy, emotionally emancipating from her family, etc. The additional distress which may be experienced by the adolescent is of particular concern when one considers its possible impact upon various aspects of maternal adaptation. Specifically, empirical evidence indicates that high levels of emotional stress are associated with puerperal depression (Paykel et al., 1980), less satisfaction with parenting and less sensitivity to infant cues (Crnic et al., 1981a, 1981b), and less secure mother-infant attachments (Vaughn et al., 1979). Thus, for this population of young mothers, it is particularly important to identify likely stressors which may be encountered, successful methods of coping with such problems, and effective resources which can assist in this process.

Few investigators in this field have utilized a theoretical framework which has the stress process as its central focus. In fact, many investigations in this area have lacked any explicit theoretical basis. Many of the studies relevant to some aspect of the stress process are mainly descriptive in nature, and only a few have considered some of the antecedent and mediating variables described in previous sections.

As mentioned earlier, adolescent motherhood can be considered an example of a psychosocial transition or, using Cohen's term, a stress event sequence (Cohen, 1981). It is a major event which triggers a series of other, related events which may be stressful in their own rights. In-depth studies describing the perceived stressors faced by

new adolescent mothers during the puerperium are lacking. Better documented are the long-term consequences of adolescent parenting which are problemmatic, such as truncated educational achievement (Card & Wise, 1978; Moore & Waite, 1977), financial difficulties (Card & Wise, 1978), and high divorce rates (McCarthy & Menken, 1979). A summary of studies which included at least a partial assessment of the early stressors encountered by these mothers reveals the following areas of concern: childcare and childcare arrangements; their relationships with the father of the baby (fob), parents, and peers; employment and finances; school; living arrangements; health; body image; insecurity about their new role; and restricted time for self and activities (Cannon-Bonventre & Kahn, 1979; Colletta & Gregg, 1981; Mercer, 1980; Zuckerman, Winsmore, & Alpert, 1979). However, this description is still tentative because of various limitations in the designs of these studies: some used a priori stressor categories; others did not make a comprehensive assessment of stressors since this variable was not their central focus; and some did not interview their subjects until several months to years after delivery. Furthermore, differences that may exist in this domain due to variations in environmental or personal factors, such as different aspects of psychosocial development, have also been overlooked. Thus, in-depth explorations of the nature of the perceived stressors encountered by adolescent mothers during the puerperium are still needed.

There is also very little information about how adolescent mothers actually cope with the various stressors precipitated by

their transition to parenthood. An exception to this is the work done by Colletta and her colleagues (Colletta & Gregg, 1981; Colletta, Hadler, & Gregg, 1981). They sampled black adolescent mothers whose children ranged in age from two months to two years. Coping responses were measured by asking subjects what they did when they encountered trouble in each of 11 potential stress areas. Thus a dispositional or trait measure of coping was used. Responses were grouped into the four categories described by Pearlin and Schooler (1978): those that modified the situation, those that modified the meaning of the situation, responses that avoided the situation, and those that managed the resulting stress. Results indicated that most adolescents took direct actions on concrete problems, used avoidance in response to interpersonal problems, and redefined their educational problems. The use of a direct action coping style was associated with lower stress, although multiple regression analysis revealed that coping style accounted for only 4% of the variance. An active coping style was also related to the presence of an active social support system. The investigators estimated that in 70% of the direct actions used, adolescents went to others, especially families, for assistance. Others have also found that the mobilization of various sources and types of social support is a major coping strategy used by adolescent mothers (Furstenberg & Crawford, 1978; Presser, 1980).

Similar to what was pointed out with respect to the research on perceived stressors, a weakness of the work regarding coping has been the neglect of factors which may contribute to the differential use

of certain coping strategies, such as various developmental indicators.

The role that social support plays in the adolescent's transition to motherhood had traditionally been overlooked (Forbush, 1979; Ooms & Machiocha, 1979). However, research from the past decade has led to several descriptions of the type and sources of social support adolescent mothers are most likely to receive (Cannon-Bonventre & Kahn, 1979; Epstein, 1980; Furstenberg, 1979; Furstenberg & Crawford, 1978; Mercer, 1980; Plume, 1974; Presser, 1980; Stack, 1975; Zuckerman et al., 1979). The most important source of advice and problem-solving, especially as it relates to childcare, seems to be the adolescent's family, especially her mother. Tangible support, such as financial assistance and childcare, is likely to be provided by both her family and the fob, although most of the assistance with childcare is apt to come from family members.

The richest documentation of childcare assistance the teen receives comes from an ethnography of impoverished black families in a midwestern city during the late 1960s to early 1970s (Stack, 1975). In describing the many domestic strategies this group has developed in response to poverty, Stack notes that in these households, shared childcare was commonplace. While an unmarried adolescent was considered eligible to bear children, she often did not raise and nurture her first child. Rather, the closest adult female was often expected to assume partial responsibility for childcare and share the rights and obligations associated with parenthood. Shared childcare and childkeeping with other kin was considered a means of creating

reciprocal obligations and alliances which could be drawn upon in case of future need.

Shared parental responsibility was also developed in response to the fluidity of household composition. Thus, any adult residing in a particular household might assume parental responsibilities for the children residing with them. This was also found in a study of the household structure of impoverished black families in Rochester, New York (Plume, 1974), the site of the present study. Childraising was viewed as one of many household tasks, all of which were assigned by the head of that household. While all household members participated in childcare, the head assumed ultimate responsiblity and control over all childraising activities, whether or not she was a particular child's biological mother.

The provision of emotional support and the affirmation of the adolescent's sense of personal worth are two additional types of social support that have also been identified in the literature as salient to this population (Epstein, 1980; Mercer, 1980). In an exploratory study of 12 adolescents during their first year of motherhood, Mercer (1980) discovered that the grandmother's recognition of her daughter's capabilities as a mother were especially important to the teen. It communicated confidence, helped to diminish the adolescent's own self-doubts, and seemed to be related to her being better able to nurture her infant.

Beyond these descriptions, the social supports of new mothers have been examined in relation to various indicators of maternal adaptation on both psychological and sociological levels. In one of

the few studies dealing specifically with adolescents, Colletta (1981) found that a summary measure of social support (including task assistance, material aid, emotional support, information/guidance, and community services support) was related to high levels of maternal affection, and low levels of maternal indifference, aggression and rejection. Emotional support was the most strongly related type of social support associated with less maternal aggression and rejection, and these relationships were strongest when the adolescent's family was the source of this support. In a group of mothers aged 16 to 38, social support modified the effects of life stress upon a measure of general life satisfaction, and was positively related to maternal satisfaction with parenting at one month postpartum (Crnic et al., 1981b). At four months postpartum, social support was positively related to different aspects of maternal-infant interaction, including maternal affective responses and maternal social-emotional growth fostering, and was found to modify the effect of high life stress on maternal sensitivity to infant cues (Crnic et al., 1981a). Other studies have demonstrated relationships between high levels of social support and: less parenting and child problems (Norbeck & Sheiner, 1982), the provision of stimulation to children (Pascoe, Loda, Jeffries, & Earp, 1981), greater security of mother-infant attachment (Crockenberg, 1981), and less likelihood of both puerperal depression (Paykey et al., 1980) and child neglect (Polansky et al., 1979).

The social supports of new mothers have also been examined in relation to perceived stress. High levels of social support were

related to low levels of emotional stress in one adolescent parent sample (Colletta & Gregg, 1981). Interestingly enough, the opposite relationship was found in an adult sample of new mothers (Carveth & Gottlieb, 1979). The authors explained these findings by distinguishing between the role of social support in the coping process versus its relationship to a particular outcome variable. If measured at a specific point in time, a positive relationship between stress and social support may reflect the increased use of social supports due to mounting stresses. Longitudinal measures may be more likely to reflect the expected inverse correlation between earlier use of support and later measures of stress.

Summary

In light of what was reviewed in relation to the stress process, some basic generalities can be made about the empirical information currently available on adolescent mothers. Much of the research thus far is descriptive in nature, and usually focuses on only one of the major stress process constructs. The most prevalent descriptions have been of either stressors or social supports, although the information on these during the puerperium is still scanty. Information on the coping strategies used by this population is even further limited. Many of the investigators in this field have been conducting their research without an obvious theoretical framework, let alone one that emphasizes the stress process. Therefore, very little is known about the interrelationships of these major constructs for this particular sequence of life events. Contextual

information is almost nonexistent. That is, variables such as the adolescent's psychosocial development that may differentially affect the major components of the stress process are rarely taken into account in research designs.

Given the current state of the empirical literature in this area, it is apparent that further basic descriptive work is needed prior to testing the hypothesized relationships outlined in the conceptual model described earlier. Since this type of information could form the basis of subsequent nursing interventions aimed at enhancing the adolescent's adaptation to motherhood, the current study was undertaken.

Research Questions

The overall purpose of this research was to conduct an in-depth assessment of the perceived stressors, coping strategies, and perceived social supports of a group of adolescent mothers during the puerperium. In light of the paucity of information about the impact that various developmental factors may have upon these constructs, one aspect of adolescent development, egocentric thought, was also examined.

The specific research questions which were addressed are:

1. What are the adolescent mother's perceived stressors during the first month after discharge from the hospital?

2. What are the coping strategies used by the adolescent mother in response to these stressors?

3. What are the adolescent mother's perceptions of her social

supports during the first month after discharge from the hospital?

4. What is the relationship between perceived social support and perceived stress?

5. What is the relationship between perceived stress and the adolescent's degree of egocentrism?

Assumptions

The type of methodology chosen for use in a particular study inevitably contains implicit assumptions regarding the phenomena of interest. In this research, it was assumed that an understanding of the adolescent's early motherhood experience can best be achieved by exploring the subject's own perspective of the event. Thus, the emphasis was placed upon ascertaining the adolescent's subjective perceptions of key variables (i.e., stressors and social supports) rather than attempting to measure these variables in a more "objective" sense. Second, it was assumed that the meaning of a subject's behavior can best be understood within its particular context. Thus, subjects' coping in response to actual circumstances were explored, rather than assumed responses to hypothetical or typical situations. Both of these assumptions have their epistemological basis in phenomenology which emphasizes the importance of the perspective of the actor and understanding the meaning of behavior within its context.

Additional assumptions also influenced the development of this research. These concern the belief that the three key variables in this study (i.e., perceived stress, coping, and perceived social

support) can ultimately be influenced by nursing interventions, that it is within the realm of nursing to perform such interventions, and that these intervention-induced changes can positively affect mothering behaviors.

METHODS

Setting

Subjects were recruited from three hospitals in Rochester, New York, a community of about 700,000 in the northwestern part of the state. Approximately two-thirds of the subjects were recruited from Strong Memorial Hospital, part of the University of Rochester Medical Center. During 1980, a total of 150 primiparous 15, 16, and 17 year olds delivered at this hospital. Approximately 57% of these were black, 31% white, and 12% Spanish. Only 11% of these adolescents were private patients. The majority (57%) were enrolled in the hospital's special adolescent maternity project (the Rochester Adolescent Maternity Project) which services predominantly lower or lower middle class clients. Most of the remaining patients received prenatal care at a community health center, servicing an impoverished area of the inner city. The remaining one-third of the subjects were recruited from two smaller university-affiliated hospitals in the community, Highland Hospital and the Adolescent Maternity Program at Genesee Hospital. Many of the patients not receiving prenatal care at the adolescent program attended either a community health center or a hospital-affiliated family medicine clinic. The average length of stay for postpartum admissions in all three settings was 48 to 72 hours after delivery.

Sample

Subjects were recruited for the study from mid-November, 1981 through mid-March , 1982. Any adolescent who met the following selection criteria during the four months the recruitment phase was in progress was asked to participate in the study: planning to keep the baby; 18 years of age or less; primiparous; gestational age at delivery between 37 and 42 weeks; infant weight greater than or equal to 2500 grams; infant Apgar score at five minutes greater than or equal to seven; and no major congenital or health problems of the infant. The latter criteria were included to ensure a sample of relatively healthy mothers and infants.

A total of 43 consecutive patients were given information about the study and asked to participate. Five refused. Of the 38 adolescents who agreed to participate, four dropped out during the course of the study, leaving a total of 34 completed protocols upon which the data are based.

Procedure

Approvals from the Review Committees for Research with Human Subjects were obtained from both the University of Utah and the University of Rochester. In addition, written approvals were obtained from Strong Memorial Hospital's Perinatal Center Review Committee and the Health Services Committee of the Board of Anthony L. Jordan Health Center, both of which are concerned with protecting the rights of patients who deliver at Strong Memorial Hospital. Prior to contacting potential subjects at any of the three

participating settings, physicians who admitted patients to the involved postpartum units were sent a letter, explaining the purpose and procedure of the study, along with a post card which they were to return indicating whether or not it was acceptable for their patients to participate in the study. Only one out of 32 physicians refused to have his patients participate.

A written consent was obtained from the subject at the time the study was explained if the adolescent agreed to participate. The investigator collected all data. Each adolescent was visited two to three times while in the hospital in order to develop a beginning sense of rapport, and decrease any anxiety or discomfort about participating in a research project. During these times, open-ended interviews were conducted which lasted anywhere from 20 to 60 minutes, depending upon the interest and comfort of the patient. The focus of these hospital visits usually centered upon the adolescent's labor and delivery, her initial impressions and experiences with the baby, her expectations about what being a new mother would be like, and general information about her pregnancy. Field notes were recorded after each hospital contact. Hospital charts were reviewed to obtain relevant background information.

One week after hospital discharge, subjects were phoned to set up an appointment for the first home visit, and to talk about the previous week. If the adolescent did not have a phone, a note was sent with a reminder about the appointment time arranged in-hospital. The first home visit took place approximately two weeks after hospital discharge (mean = 14.5 days). This interview was tape-

recorded and followed an open-ended format, lasting anywhere from 30 to 90 minutes, depending upon how verbal the adolescent was. The discussion usually centered upon the experiences, thoughts, and feelings the adolescent had over the past two weeks. Information was usually obtained during this time about her perceived stressors, the coping strategies she used in response to these demands, and her perceptions of the types of social supports offered. The interview focused on the adolescent's particular areas of concern or interest, and therefore a comprehensive assessment of the three major variables of this study was not pursued at this time.

One week after the first home visit, subjects were again phoned to set up an appointment for the final interview. Reminder letters were again sent to adolescents without a phone. This second home visit took place approximately four weeks after hospital discharge (mean = 29.5 days). This interview was tape-recorded and began, as did the first home visit, by reviewing the adolescent's experiences, thoughts, and feelings encountered over the past two weeks. Any issues raised during the first visit that were of an on-going nature were pursued. Following this, a comprehensive assessment was undertaken of the three major variables of interest. Any areas of concern that had not been discussed during the two home visits, but had been identified as potential stressors in the literature or from the investigator's past experience with this population, were brought up by the investigator at this time. (See Appendix B for potential stressors reviewed during this interview.) If she acknowledged that any of these was a problem for her, then the adolescent was asked

what she did or thought in order to cope both with the situation and with her feelings of distress about the problem. After this, the Perceived Social Support Interview was conducted, followed by the administration of two questionnaires: the Postpartum Stress Questionnaire , and the Imaginary Audience Scale. This same sequencing was followed for all subjects.

Instruments

Perceived Social Support Interview

This semi-structured interview is adapted from Hirsch's (1980) Support System Scale. (See Appendix.) It uses a list of those individuals who have been major sources of support to the subject as a base for discussion. For each source listed, the adolescent was asked how the individual had been helpful over the past four weeks. For each type of helpful interaction mentioned, the adolescent was asked to rate its importance and adequacy. After the adolescent exhausted all examples of support on her own, the investigator assessed the following areas of social support if they had not been mentioned: (a) social reinforcement , defined as any praise or communication of approval or confidence regarding the subject's actions or behaviors, (b) emotional support , defined as the communication of concern or reassurance during times of distress; also, any interaction which gives one a feeling of security, being cared about, comforted, understood or accepted, (c) tangible support, defined as the provision of any material or concrete assistance, (d) cognitive support , defined as the communication of advice, guidance,

or information, (e) socializing , defined as any visiting or recreational activity that was helpful to the adolescent.

The importance and perceived adequacy of each type of support received from each source was rated, using the following scale:

+1: (a) support given is only slightly important, regardless of its adequacy, or (b) support given is moderately important, but is not adequate (i.e., the individual prefers more or less support).

+2: (a) support given is very important, but is not adequate, or (b) support given is moderately important, and is adequate.

+3: (a) support given is very important, and is adequate.

Since it was possible for several sources to provide the same type of social support, a summary score for each type of social support was obtained by summing the scores for that type of support across sources. When each of these summary scores were combined, a total social support score was obtained. The higher the score, the greater the perceived social support.

Postpartum Stress Questionnaire

This is a modified form of the Pregnancy Stress and Support Interview developed by Olds (1979). (See Appendix.) The original purpose of the instrument was to evaluate services provided by the Prenatal/Early Infancy Project in Elmira, New York. Most of the project's clients are single, young, and poor, and thus are similar to the subjects who were recruited in this study.

In developing this tool, a priori categories of stress were identified. These areas were chosen on the basis of their relevance to living with limited financial, personal, and social resources, and/or being pregnant for the first time. The postpartum form of the questionnaire includes the following categories: employment, education, living arrangements, housing location, finances, babysitting, childcare, relationship with boyfriend, and a general concern category including items on social restrictions, mood and physical appearance. Reliability and validity work on the instrument is still in progess. Preliminary data are available, but they apply only to the prenatal form of the instrument.

The questionnaire was used in this study in order to have a quantifiable measure of perceived stress which focused on issues related to new motherhood. It can be self-administered. Subjects are asked to use a four point scale to rate the frequency with which they worry about specific aspects of each stress category, and then to give a summary rating on a five point scale regarding the degree of worry about each major stress category. The total stress score is simply the sum of these ratings, with a higher score indicating a greater degree of perceived stress.

Supplemental items were added to assess potential stressors not addressed in the original form of the questionnaire. They included six items forming a "relationship with family" category, one item added to the "childcare" category ("wondering if I'm doing a good job of being a mother"),and one item added to the "relationship with boyfriend" category ("what he thinks of me as a mother").

Imaginary Audience Scale (IAS)

This instrument, developed by Elkind and Bowen (1979), is based upon Piagetian theory, and was designed to tap a consequence of adolescent egocentric thought (Elkind, 1967). (See Appendix.) The scale is comprised of two subscales, the Transient Self (TS) scale and the Abiding Self (AS) scale. The TS attempts to tap self-consciousness related to momentary appearances and behaviors which the individual does not regard as reflective of the true self. It consists of six potentially embarrassing situations of this nature. The AS attempts to tap self-consciousness regarding long-lived characteristics which the individual regards as permanent aspects of the self. It consists of six potentially self-revealing situations. For each of these scales, the subject chooses from three possible reactions reflecting: (a) an unwillingness to participate (scored 2), (b) an indifference to participation (scored 1), and (c) a willingness to participate (scored 0). The higher the score, the less willing the subject is to expose herself to an audience.

Reliability and validity information are based upon a sample of 697 nine, 11, 13, and 17 year olds from a large, middle class, suburban school district (Elkind & Bowen, 1979). Test-retest reliability coefficients over a four month period for a randomly selected subgroup from the sample were as follows: .66 for the TS scale; .62 for the AS scale; .65 for the total IAS. Alpha coefficients to assess internal consistency were: .52 for the TS scale; .54 for the AS scale; and .63 for the total IAS.

Construct validity was supported by the following correlations

predicted by the investigators: a statistically significant negative correlation of .32 between the AS and the Piers-Harris Children's Self-Concept Scale; a statistically significant negative correlation of .34 between the AS and the Coopersmith Self-Esteem Inventory; no relationship between either IAS subscale and the Nowicki-Strickland Locus of Control Scale for Children; a moderate but significant positive correlation of .35 between the two IAS subscales.

More recently, a revalidation study of the IAS was undertaken using junior and senior high school students from a rural area (Adams & Jones, 1981). The overall results of the study indicated "mixed evidence toward consistent reliability and construct validation" (p. 7). While the alpha coefficients for internal consistency were very similar to those reported by Elkind and Bowen, individual item correlations with the AS and TS subscales failed to discriminate between the two. Thus the authors question whether data analysis should be performed on the individual subscales.

Their results did, however, support the original study's discriminant validation data, indicating that the IAS was a different construct from social perspective-taking and a social desirability response.

RESULTS

Demographic Data

Table 1 contains a description of the demographic characteristics of the 34 subjects who completed their participation in the study. In general, most were 17 or 18 (73%), black (65%), single (74%), living at home with family (71%), and from the lowest three social status levels (73%) as determined by Hollingshead's Four Factor Index of Social Status (Hollingshead, 1975). Most were unemployed (88%), currently in school or graduated (73%), and involved in either a school- or hospital-based program for pregnant teenagers (68%). Most were still involved with the fob (77%), and only very few had no contact with him at all (9%). Almost all claimed to have had previous experience in caring for infants (88%).

Demographic characteristics of those who refused participation, and those who dropped out of the study are as follows. Of the five subjects who refused, all were 17 and 18 years of age. Four were married. One was black and the remaining four were white. While two refused to participate because they were "not interested," reasons for the three others' refusals were likely to have been due to problems they were experiencing. Two became tearful during the explanation of the study, although neither could talk about what was on their minds. The remaining adolescent had not had her first prenatal exam until one week prior to delivery, and had only told her

Table 1

Demographic Data

(N = 34)

	%		%
Age		Contact w/fob	
15	15	married	27
16	12	dating	50
17	41	not dating, but sees	14
18	32	no contact	9
Race		Experience w/infants	
black	65	yes	88
white	35	no	12
Marital status		Infant sex	
single	74	male	62
married	26	female	38
Living arrangements		Type delivery	
w/family	71	vaginal	85
w/fob alone or w/his family	29	forceps	6
		C/S	9
SES		Feeding method	
1	32	breast	15
2	26	bottle	73
3	15	started w/breast; bottle by 2nd interview	12
4	24		
5	3		
Job status		In special prenatal or school program	
not working	88	yes	68
working FT	3	no	32
working PT	9		
Educational status		Grade completed	
teen maternity program	32	7	3
regular high school	21	8	18
graduated	20	9	9
dropped out	27	10	26
		11	23
		12	21

family about the pregnancy one day before her delivery.

Of the four subjects who dropped out, all were 17 or 18 years old, black, and single. All but one were still dating the fob. Two had no home visits: one moved unexpectedly into the fob's household and never returned my calls; the other felt she was too busy to participate. Two had one home visit: both of these adolescents were not at home for the two subsequent appointments I made with each of them. The transcripts of the first home visits were reviewed for possible reasons for this behavior. One subject was very quiet and difficult to interview. She became tearful when I broached the subject of the fob (whom she was not dating) and could not talk about it. She also appeared disinterested or detached from the baby during the time I was there. Since she was obviously disinclined to talk about any uncomfortable issues or feelings she was experiencing, it may have been easier for her to avoid the second interview. There was no obvious reason for the other subject's lack of follow through with the last visit.

Analyses

All tape-recorded interviews were transcribed in order to facilitate content analysis of the data. These transcripts were then reviewed, and a list was compiled of all the stressors mentioned by the adolescents. A response was coded as a stressor if any of the following were present: if anything the subject said indicated a negative attitude toward the issue; if the teen complained of being scared, worried, concerned, or upset; if the adolescent indicated she

was uncertain of herself in a situation; or if she indicated that something had been hard, bad, or a problem for her. General categories were then developed by combining similar items. The formation of categories was guided by the general recommendations set forth by Fox (1976): i.e., that they be homogeneous, inclusive, useful, and mutually exclusive. After the category development, transcripts were again reviewed and the interviews were coded for the presence of any of the identified perceived stressors.

Interrater agreement for perceived stressors was ascertained as follows. An independent coder was given the list of 13 perceived stressors along with their definitions and subcategories. After jointly coding two interviews with the investigator for training purposes, three randomly selected interviews were independently coded for stressors. There was agreement on seven out of ten stressors identified by the investigator.

The process involved in the coding of coping was as follows. For each perceived stressor category, behaviors or thoughts directed toward dealing with the problem, and toward managing negative emotions which were aroused because of the problem were identified and grouped according to these coping functions. Interrater agreement for coping was based upon an independent coding of three randomly selected interviews. The coder was given definitions of problem- and emotion-focused coping. He was then given the list of perceived stressors which had been identified for a particular interview, and asked to identify the behaviors and thoughts dealing with the problem and the accompanying negative emotions. These were

then grouped according to their focus. Agreement was based upon the identification of similar responses, and then the placement of these responses into the same coping category as originally done by the investigator. There was agreement on 41 out of 48 coping responses identified by the investigator. Of these 41 responses, 36 were categorized similarly.

Finally, transcripts were reviewed in order to compile a list of all the interactions which the subject identified as being helpful or supportive. Something was coded as providing social support if it communicated positive affect, affirmed or endorsed the subject's behaviors, or provided material or symbolic aid (Kahn, 1976). These individual examples were then grouped into the five types of social supports outlined in the Perceived Social Support Interview (i.e., social reinforcement, emotional support, tangible support, cognitive support, and socializing). In order to determine interrater agreement for the social support categories, the independent coder was given the list of the five social support categories along with their definitions. Three randomly-selected interviews were coded for the presence and sources of each of these social supports. There was agreement on 26 out of 27 of these items identified by the investigator.

Findings

Perceived stressors and coping

Thirteen categories of perceived stressors were identified in this group of new adolescent mothers. Arranged according to the most

frequently voiced stressors, they included concerns about: the baby; the fob; the extra responsibilities or limitations of motherhood; family; body image; money; relationships; health; living arrangements; school; the fob's family; managing the household; and babysitting.

1. Concerns and coping strategies related to the baby. Thirty-three subjects (97.1%) expressed some concern about their relationship or interactions with the baby, some facet of babycare, or the baby's health. In dealing with these issues, the most frequently used mode of coping seemed to be turning to others for help.

Doing things with the baby the first few times, such as bathing, cord or circumcision care, taking a temperature, etc., usually evoked some anxiety. A popular way the teen handled this was to delay certain aspects of babycare until her mother or another family member was available to assist her.

Worries about potential or actual illnesses or problems the baby might have were also a source of concern. These ranged from worrying about the cause of the baby's hiccoughs to fears of crib death. Concerns about the baby's feedings were also frequently expressed. More often than not the teens complained that the formula was not "holding" the baby and felt that the health professionals' recommendations were resulting in the baby being underfed. The baby's choking or spitting up either during or after feedings was also a common focus of the adolescent's concern.

While one-third of these adolescents turned to health

professionals for information about how to handle childcare problems, approximately two-thirds turned to family members, especially mother. For example, when the teen was worried that the baby was not getting enough to eat from the recommended amount of formula, she asked her mother what to do. Invariably she was much more satisfied with her mother's recommendations to supplement feedings with cereal, etc., than she was with health providers' recommendations to make do with formula alone.

Having to take care of the baby when the teen was feeling tired, sick or when she was alone was a problem, but the almost universal complaint was having to take care of the baby at night. Many had not anticipated that this would be as difficult as it was, and this was frequently the first thing that was mentioned during the initial home visit when the teen was asked to describe how the past two weeks had gone. In dealing with this problem, it was not uncommon for the teen to rely on her mother, grandmother, or even sisters to share this kind of childcare responsibility.

Not being able to stop the baby's crying was also a frequent source of distress for the new mother, and this invariably led to insecurities about how she was doing in her role. The teen worried that she didn't know what the baby wanted, didn't know what to do with him, and wondered if she was doing anything wrong. Most, however, were amazingly versatile in exploring different solutions to this kind of problem. For example, after checking the usual reasons for fussiness such as wet diapers, hunger, etc., the teen would typically try different things to soothe the baby, such as changing

his position, rocking or walking with him, singing or telling him a story, etc.

When feeling stressed by babycare problems, the teen frequently consoled herself with the thought that her baby would soon be getting older, and that this would mean sleeping through the night, less crying, less frequent feedings, etc. This teen's comments were also voiced by most of the other new mothers after they had a hard night with the baby:

> But I pulled through it. I said it'll be over with soon - it'll be over with soon. He's gonna get bigger, and then you won't have to worry about that no more. Or stuff like that. That's what I think about. Oh, I can't wait til he gets bigger.

Others reminded themselves that they had really wanted the baby and tried to think about all the positive things about having had the baby. This seemed to be an attempt to diminish the importance of some of the difficulties they encountered.

Some were fearful of "spoiling" the baby. In fact, this was one of the few concerns voiced in the hospital. A spoiled baby was one who cried all the time to be picked up, and therefore many teens were acutely aware of their behaviors which might contribute to this (i.e., "too much" holding or picking up).

A few mothers were concerned about not spending as much time with the baby as they wanted because of school or work commitments. Other rarely-expressed concerns were ambivalent feelings about having had the baby, and a fear of losing one's temper and hurting the baby.

By the second home visit, most of the earlier anxieties the teens had expressed about caring for the baby had dissipated. They

had gotten more familiar with reading the baby's cries and were feeling more comfortable in responding to his needs on their own without maternal supervision. In their words, "I got used to him."

2. Concerns and coping strategies related to the fob. Twenty-six subjects (76.5%) expressed some concern or worry related to their relationship or interactions with the fob, or about his relationship or interactions with the baby.

Common concerns centering on the couple's relationship included general problems in getting along, not feeling understood, or not being able to talk over issues or problems. When this was the case, the teen often turned to a sympathetic female to share her feelings about these problems. If this confidante had been through a similar experience, that was even more helpful. As one adolescent explained, she talked to her divorced mother about her problems with the fob whom she was no longer dating because "she knows how it feels."

A few felt that the fob was too demanding, and not considerate of the time the teen needed to spend caring for the baby. The impact of this type of problem, especially upon the married adolescent, is vividly illustrated by this 18 year old's comments:

> Between him [the baby], the dog, the fish, John [husband] - it's bad. You don't get time for nothing. You go to eat, you got him screaming. You're feeding him - the other one's wanting to eat. And the dog's running around. Just last night, I made a pizza for John. So I had it in the oven, and the baby's wanting to eat. So I told John to hold him. And he's screaming. And John says - get him the pacifier. And then the baby threw up on him and that made it all the more worse. So he says, you get the baby. I says, well I can only do one thing at a time. So I just give him his food, and I go feed the baby, and I give him back the baby after he takes a little. And he's screaming again, so you gotta rush your way around...I was gonna get

> mad and say the hell with everything. But I just kept doing my thing.

In this situation, the adolescent's husband contributed to her mounting frustration rather than acting as a buffer against it because of his inability or unwillingness to intercede in a positive sense.

Other infrequently-expressed relationship concerns included insecurity about their relationship (i.e., wondering if he still loved her, or if he may start seeing someone else), and having less time together.

Something that distressed and angered some of the new mothers was the fob criticizing, questioning, or telling them how to care for the baby. When this occurred, the teen was quick to reassure herself that she knew that she was doing what was right for the baby. She often bolstered this thought by reminding herself of all the babies she had cared for in the past.

A problem that produced similar feelings of distress was when the adolescent's husband wanted to go out, leaving her home with the baby. In contrast to the above coping strategies which focused on dealing primarily with these feelings of distress, some teens were able to deal with relationship issues by directly confronting the problem. For example, one 17 year old was quite upset when her new husband told her of his plans to go to a party and leave her home alone to care for the baby. She talked over this issue with him with the result that both went out and shared the responsibility for watching the baby at the party.

If the couple's relationship had been broken off, or if it was a tenuous commitment, the first week at home usually precipitated feelings of regret and sadness that the baby would either not get to know his father at all, or not be raised in the same household with him. It is interesting to note that this concern was almost never brought up by the adolescent when she was asked to describe her current feelings about the relationship she had with the baby's father. Rather, it came out when the teens were asked if they had experienced "baby blues" or found themselves "crying for no reason" since their delivery. It seems that this was not a legitimate complaint, and so the adolescent tried to present a facade that the lack of a firm commitment from the fob was unimportant. By labeling the incident as due to "baby blues," the teen seemed better able to admit to and discuss her sadness over this issue.

While eight of the couples were no longer dating, five of the fobs knew about the pregnancy, and wanted to maintain some contact with the infant. All of the young mothers agreed that it was his right to do so, but had ambivalent feelings about seeing him again. They expressed a kind of "wait and see" attitude, not wanting to invest too much hope in the father's continued involvement with the baby. There also was some indication that some of these teens harboured fantasies that they might eventually resume a relationship with the baby's father if he successfully assumed his paternal responsibilites. This 15 year old's statements are illustrative:

> He's allright. He act like he'll do whatever he can for the baby...I felt real good [when he said he'd bring clothes for the baby]. I don't really want to talk to him,

> but I gotta talk to him. Because I got a baby by him. But other than that, I don't think I 'm gonna go with him or anything. 'Cause he was saying that it wasn't his. [So you're not going to go back with him.] No, I think about it. Like just now I thought about that. You know, if you have a baby by someone, you sure don't want to let it grow up with a father that is different. But he's just - it just ain't right now. Maybe later, in a year, he'll act like a father and wanna be around his son more. And if he act that way about him, maybe me and him get back together. I would want him to grow up with his father, instead of another man...Right now, I don't wanna have nothing to do with him. But I have to.

3. Concerns and coping strategies related to the extra responsibilities or limitations of motherhood. Twenty-one subjects (61.8%) expressed worry over the additional responsibilities that resulted from becoming a mother, or about the restrictions and limitations that were imposed because of their situation.

By the second visit, many of these subjects complained of feeling bored or isolated, and were upset that their usual freedom of movement to get out of the house as easily as prior to the birth was curtailed. However, many coped by packing up the baby, supplies, and themselves and going out shopping or visiting with friends or family. This was a remarkable feat, considering all the paraphernalia required to travel in Rochester's winter weather.

A few expressed concerns about the baby's total dependence upon them. This involved the necessity of thinking of the baby first, and was a difficult issue for some. Related to this was the complaint of a few regarding their inability to be as spontaneous as they had been. "I just can't get up and go anymore like I used to", was commonly heard from these teens. When these demands became too much, many turned to family or husbands to take care of the baby for some

relief. Most were sensitive to the new mother's need to have time away from the baby, and babysat periodically during those first four weeks home from the hospital. Some only required a few minutes of time alone in order to temper their frustrations and allow them to feel ready to face the baby and his needs.

Again, some looked forward to when the baby would be older and, thus, less dependent upon them. They also used, as one adolescent put it, "brainwashing" to handle their feelings, by reminding themselves that with the advent of good weather, things would change and they would be able to again get outdoors whenever they wished. Others looked forward to their return to school which would enable them to be out of the house and back with friends.

Surprisingly, only a very few complained of having too much to do. This could have been because of the newness and excitement of the situation, or the amount of help most received during the first few weeks at home.

4. Concerns and coping strategies related to the teen's family. Twenty subjects (58.8%) had concerns about their relationship or interactions with family members, or about the family's interactions with the baby. Many of the ways they coped with this situation centered around managing their feelings of distress.

Most of the complaints in this category centered around the teen's feeling that some family member was either criticizing, questioning, or telling her how to care for the baby. This was a particularly sensitive issue for those whose mother was the critical party. When an adolescent encountered this kind of criticism, or

feared her mother was trying to "take over" the care of the baby, she often turned to the fob to vent her concerns and anger. It seemed to be very important for these teens to have someone outside of the family to confide in about this problem because of their fear that other family members would be neither understanding nor tolerant of these complaints.

At other times, when the young mother was faced with a criticism or demand from a family member that ran counter to her own wishes about what to do with the baby, she tried to ignore the situation. In these instances, the adolescent did her best not to respond to the family's remarks in order to avoid an argument, and often did what she wanted to do with the baby anyway. One 16 year old coped with this kind of situation by emotionally detaching herself from the baby. She displayed little interest or pleasure in him during the two home visits and was not as aware of changes that had gone on in her infant over the four weeks as were most of the other young mothers. Her reaction to her family, especially her mother, was similarly passive, and she relied heavily on intrapsychic processes to handle her distress about the situation. She describes her interactions with the family as follows:

> They just take over - like they had the baby...They be telling me what's wrong, what's right, and I just don't like that...It used to bother me a whole lot. I used to be wanting to say something to her [mother], but, you know, she taking care of him more than I am. So I just don't say nothing. She doing her part. She probably doing it cause it's her first grandchild and she's happy...She gave him everything he got now. I haven't really given him nothing - but attention - that's all.

The remaining concerns were voiced by only a few subjects, and

included worrying that family was: holding or spoiling the baby too much; ignoring or rejecting the baby; or continuing to disapprove that the teen had had a baby. A few felt like they were a burden to the family since they had had the child, and expressed concern about both the monetary strain on the family's resources, as well as about the aid they received in childcare. A very few expressed concern about what the family thought of their mothering, and a couple complained of just "not getting along" with the family.

When the adolescent felt disappointed or let down by a family member, she was apt to invent reasons to make the situation seem more reasonable or acceptable. For example, one married adolescent who lived in her own apartment felt badly that her mother had not visited her yet and did not seem excited about the baby. She was one month postpartum and had only been able to visit her parents twice because transporation was a problem for her and the family was unwilling to pick her up with their car. She consoled herself about the situation by emphasizing that her mother truly <u>wanted</u> to visit her, but could not because she was always very busy and had to take care of her father (although he was not disabled or ill in any way).

5. <u>Concerns and coping strategies related to body image</u>. Sixteen subjects (47.1%) expressed concerns about their looks or attractiveness since the baby was born. The idea of returning to maternity clothes now that they were no longer pregnant was demoralizing to some, and the thought that others might still think they were pregnant was a source of self-consciousness and embarrassment. In dealing with this problem, almost all of these

adolescents started some kind of exercise program to speed their return to their pre-pregnant shape. The married teens who had these concerns also tended to seek others' reassurance. While a few turned to their mothers for support, all talked with husbands in order to get reassurance that they were still desirable or attractive to them.

6. Concerns and coping strategies related to money. Sixteen subjects (47.1%) were worried about not having enough money now that they had a baby to care for. They worried about not having enough for doctor and hospital bills, rent, baby supplies and clothes, and spending money for themselves.

Most of the teens were problem-focused in their approach to this issue. Many actively explored two possible solutions to this problem: getting a part-time job, and/or applying for public assistance. Others developed plans regarding how they would earn extra money. Some of these involved: getting working papers upon returning to school so that the adolescent could enroll in a Department of Social Services-sponsored work program; babysitting for a sibling in the spring; and getting a job in a fast food chain when school recessed for the summer.

7. Concerns and coping strategies related to relationships. Twelve subjects (35.3%) had some feelings about others' interactions with the baby, or about their own relationships with peers. The most frequent complaint related to the adolescent's inability to set limits on visitors and their interactions with the baby. Many were deluged with well-wishers the first week at home, all of whom, it seemed to the teen, wanted to touch and hold the baby. While these

contacts were very tiring to the teens, they were particularly disturbed about the possibility that the baby would become ill from all the contact with strangers. Despite their discomfort, however, most were unable to express these reservations to others. These teens generally dealt with their feelings by resigning themselves to the situation because they felt there was nothing which could be done about it.

Worries about their relationship with friends were not frequently expressed during this month, but when they were they involved: seeing friends less; feeling that friends were uncomfortable saying certain things in their presence because of their new role; friends' disapproval of the adolescent's having had a baby or, alternatively, their jealousy; and their questioning her care of the baby.

Only a few of those not dating the fob had given thought to dating other young men in the future. They worried about what sort of an opinion these men would have of them since they were now mothers. They also expressed a wariness about establishing new relationships of this kind, and felt it would be difficult to trust someone again.

8. Concerns and coping strategies related to health. Twelve subjects (35.3%) were worried about their health or physical condition after delivery. Some had problems with breast engorgement, leaking, or infection. Others were uncertain about the normality of their lochia, or whether or not their stitches had healed properly. These teens tended to be problem-focused in response to this concern.

Most often this involved their seeking out a variety of sources (i.e., family, health professionals, and friends) for advice regarding what to do.

9. Concerns and coping strategies related to living arrangements. Nine subjects (26.5%) expressed a variety of concerns related to this category. Some complained of living far away from friends or relatives. These were teens who had moved to their own apartments because of their recent marriages. They lived in low-rent housing on the outskirts of the city that was, indeed, away from areas where friends and family lived. Others complained of not having enough room or enough privacy in their homes; not having a permanent place to live; or problems with the landlord.

When faced with an unsatisfactory living situation, the adolescent mother often made plans which would enable her to move to another location. However, others who could not move, explored different solutions to their problems. For example, one newly married adolescent living away from friends and family overcame her guilt about calling long-distance, and kept in touch with others by phoning them every day. Another married teen, living with her family and dissatisfied with the lack of privacy, managed to spend much of her time in her room where she could be alone with her husband and baby.

10. Concerns and coping strategies related to school. Eight subjects (23.5%) worried about either not having enough time to do homework now that they had so many additional responsibilities, or not being able to get up for school after they had been up at night

with the baby. A few were concerned that problems such as these might prevent them from being able to graduate. These adolescents were determined to finish school as well as take care of their babies, however. Many rearranged study time so that homework would get done. For some this meant studying at home when the baby was asleep; for others it meant doing homework at school.

11. Concerns and coping strategies related to the fob's family. Seven subjects (20.6%) expressed some concern about their relationship with members of the fob's family, or about their relationship with the baby. Specifically, these centered around their criticizing, questioning, or telling the teen how to care for the baby; their spoiling the baby; and wondering what they thought of the adolescent's mothering. As one would expect, these concerns were particularly important for those few adolescents living with the fob's family. However, even if the teen did not reside with them, the addition of the baby often brought them into more frequent contact with these new grandparents, and their opinions often had a strong impact upon the new mother. Most of these teens tended to deal with their feelings of distress about this issue, and although no one predominant strategy emerged, the following were described by one or two of these subjects: talking to others to share their feelings; crying about the situation; wishing things were different; and thinking of reasons to justify the family's behavior or make it seem acceptable.

12. Concerns and coping strategies related to managing the household. Six subjects (17.6%), almost all of whom were married and

living in their own apartments, were somewhat worried about their abilities to organize the household and do necessary housework, now that they had the time-consuming task of caring for the baby as well. One way the teen usually handled this situation was to ask her husband for help with the housework. Some also tried to resign themselves to the fact that things were just not going to get done and tried not to let it bother them.

13. Concerns and coping strategies related to babysitting. Only five subjects (14.7%) talked about problems related to babysitters. Specifically, they were concerned about not having a babysitter and not being able to find one they could trust. If they did find one outside the family network, they still worried about having to leave the baby with strangers. Babysitting alternatives outside of family or close friends (including school-related day care) were not acceptable to these young women. Again, because of the small number of adolescents with this concern, no one method of coping predominated.

In order to determine whether the stressors identified during the interviews were, indeed, concerns perceived by the adolescents, the Postpartum Stress Questionnaire responses were examined. Nine of the interview stressor categories were similar to items in the questionnaire. They were concerns regarding: responsibilities and limitations of motherhood; baby; babysitting; relationships with the family and the fob; body image; money; living arrangements; and school. Since there were no corresponding items for concerns about the fob's family, relationships, health, and managing the household,

the following does not apply to these categories.

If a perceived stressor was identified from the subject's interviews, her questionnaire was then reviewed to determine if an item from that stressor category was labelled as a source of worry. On this basis, agreements for each of the nine categories ranged from 91.2% to 100%, with an average agreement of 95.7%, indicating that if a concern was identified by interview, it almost always was labelled as a concern by the adolescent in the questionnaire (see Table 2).

However, when each subject's interview and questionnaire were compared to determine if a stressor identified by either method was also identified by the other, the agreement was quite poor, ranging from 35.3% to 91.2%, with an average agreement of 59.8%. Thus, this

Table 2

Percent Agreement Between Interview and Questionnaire Stressor Identification

Stressors	Interview stressor also identified in questionnaire	Same stressor identified by both methods
Responsibilities of motherhood	97	64.7
Baby	94.1	91.2
Babysitting	94.1	44.1
Fob	91.2	79.4
Family	97	67.6
Body image	91.2	58.8
Money	97	52.9
Living arrangements	100	35.3
School	100	44.1

poor agreement was a result of a higher number of concerns identified in the questionnaire which were not identified from the interview. It therefore appears that the coding of perceived stressors from the adolescents' interviews may be a conservative estimate of their actual occurance.

Perceived social supports

The following kinds of aid were perceived by these subjects as supportive in some way, and were reported during either the open-ended or semi-structured interviews. For a more detailed account of which sources provided different kinds of social support, see Table 3.

1. Tangible support. All of the young mothers in this sample reported receiving some kind of concrete or material aid. The adolescent's mother was mentioned most often as the source of this kind of assistance, and other family members were mentioned almost as

Table 3

Percent of Adolescents Identifying Sources who Provided Different Kinds of Support

		Sources					
Support	N	Mother	Other family	Fob	Fob's family	Friends	Profs
Tangible	34	82	79	71	24	18	15
Emotional	32	53	63	69	34	38	19
Cognitive	28	82	39	—	29	21	18
Social reinforcement	26	58	31	39	35	15	12
Socializing	16	6	47	—	25	47	—

often. This is not suprising, since the most frequent type of tangible support reported by the teen involved help with childcare, including babysitting. In fact, since most subjects' families naturally assisted with many of these responsibilities during the month, it is understandable that worries about babysitting were infrequently voiced. Other kinds of tangible support provided during the month were: gifts, including a variety of baby supplies; money; transportation; and help with chores and housework.

2. Emotional support. Thirty-two adolescents (94.1%) reported receiving some kind of assistance which fell into this category. The fob was mentioned most often as the source of this type of support, followed by the adolescent's own family. A frequently cited example of this kind of support was being able to talk to someone when upset or whenever the adolescent felt she needed. This has been referred to by others as the presence of a confidante (Lowenthal & Haven, 1968). Any show of concern or communication that implied an individual was there if needed was also frequently mentioned as being supportive during this first month at home.

Most adolescents found any praise, interest, or acceptance directed toward the baby to be particularly important. Not surprisingly, this seemed to be interpreted by the new mother as others' approval and pleasure in herself.

Other examples of emotional support mentioned less often were: sharing similar experiences and feelings with another; having someone mediate or intercede in a difficult situation; having her own ideas or decisions supported; and getting a feeling of acceptance or

belonging from someone.

3. Cognitive support. Twenty-eight teens (82.4%) reported receiving some kind of information, guidance, or advice which they considered helpful. The adolescent's mother was by far the most frequently mentioned source of this type of support. Suggestions, as well as both the supervision and demonstration of tasks, were all mentioned as important.

The issue regarding whether or not social support should be measured in objective versus subjective terms was particularly relevant to this category of support. The mere provision of information or advice did not make an interaction supportive, as perceived by the adolescent. In fact, at times it was construed as a source of stress. The adolescents described what made advice-giving supportive. The most important component which emerged was that the advice being offered was suggested, with the explicit or implicit understanding that the adolescent may decide not to take the advice. Information had to be offered in such a way so that the young mother felt respected in her new role. As one teen explained about the way her own mother offered her advice, "She makes you feel like it's your baby when she says, do you need help - do you want help?"

4. Social reinforcement. Twenty-six subjects (76.5%) reported receiving some kind of praise or communication of approval from others regarding how they were doing as new mothers. The adolescent's own mother was the most frequently mentioned source of this type of support, followed by the fob. It was important to the adolescent to have the people who saw her most with the baby think

she was doing a good job. This made her feel both proud and confident of her mothering abilities. In fact, this positive social reinforcement was often what left the teen's fragile sense of competence intact after a particularly difficult time with the baby, as can be seen with this newly married teen:

> When everything gets too bad - especially last night. Because I didn't know what to do. I walked him, I burped him, and that didn't help. I fed him. So I guess I just curled up in bed with him [husband] and started crying...He just said he knows it's alot. He keeps saying I'm a very good mother. That helps alot. It gives me encouragement. I like that...'Cause sometimes you think you're not doing right. But when they tell you you are, and when it looks from their point of view you are, it helps. Makes you wanna keep going.

The adolescent was also quick to interpret indirect behaviors as comments on her role performance. For example, one teen who had told her boyfriend not to do certain things with the baby, felt complimented when she later overheard him telling someone the same thing.

5. Socializing. Sixteen teens (47.1%) reported experiences such as receiving visitors or participating in some recreational activity with someone which they felt was helpful to them during their first month home from the hospital. Both friends and extended family members were mentioned most often as sources of this kind of support. This differed from the kind of visiting that occurred during the first week when the adolescent was still recovering from her labor and delivery. Later on during the month, it was important to the teen to have friends or family keep her company so that she felt less isolated or "bored."

Overall impressions

Since a major purpose of this study was to describe the types of stressors that adolescent mothers faced during the puerperium, it is easy to give the impression that this time period was traumatic or particularly distressing for these young women. However, this generally was not the case. This general impression was also corroborated by the adolescent's responses to the overall concern items in the Postpartum Stress Questionnaire. Only 14 subjects (41.2%) were either "worried alot" or "extremely worried" about any of the 10 stressors evaluated by this instrument. Further, eight of these teens were concerned about only one or two problem areas. Rather, the first few weeks home from the hospital were typically seen as pleasurable and exciting, and, on the whole, the challenges which presented themselves were dealt with quite adequately by the teen in conjunction with her family.

Anticipatory coping

A major reason for the relatively smooth transition observed during this time seemed to be the result of the adolescent's anticipatory coping which occurred during pregnancy. That is, most of these young women mobilized actual coping strategies prior to the occurrence of a potentially stressful event which seemed to either avert the problem itself, or minimize the distress associated with it.

During the in-hospital interviews it became evident that very few of the adolescents expected to encounter any major difficulties

when they arrived home with the baby. Most were quick to point out that they had had some, if not extensive experience caring for infants, and therefore had some background in knowing what to expect and how to handle situations that might arise. Beyond this experience, however, most anticipated that if a problem did arise, they would be able to get the necessary help from their families to handle the situation. While this expectation did not always stem from explicit discussions or formal plans they worked out with their families, most young mothers were confident that any questions or concerns that arose over the first few weeks at home would be adequately dealt with by seeking help from family. In addition to expecting any needed guidance, they also counted on family to help out with sharing some of the actual babycare tasks. Most expected their mothers to be active in this role, but many also took for granted that siblings would help out whenever necessary. In addition to help with babycare, many also assumed that the family would be a major provider of babysitting services. Again, for some this expectation was based on explicit discussions, but for others, it stemmed from an implicit agreement between the adolescent and her family.

Anticipatory coping took place with respect to other areas as well, and served to ward off potential problems that many teens might have had. School was one major area where this frequently occured. Many of these subjects had transferred to a special school program for pregnant teens based at the YWCA. They did so partly because of the school's well-known reputation of giving minimal homework. This

was seen as having major advantages after delivery. First, the teen would have more time to spend with her baby. Second, she did not need to worry about how she was going to manage doing her homework at home when she also needed to be caring for the baby. Family members were expected to help in this situation, too, however, since the adolescent clearly anticipated that if her mother was home, she would care for the baby until the teen's homework was completed. Some students had also made arrangements for assignments to be dropped off at their homes after delivery so they would not be too far behind when they returned to school. These kinds of anticipatory arrangements contributed to the fact that minimal concern was expressed about school-related matters after the baby was born.

Another potential stressor which was averted by many adolescents was financial problems. During pregnancy, many had explored possible sources of assistance such as Medicaid and public assistance for the baby. Again, most also expected the family to help support the baby, and a few had discussed this issue with the fob to determine if he would also financially contribute to the baby's care. The availability of all of these sources of monetary support lessened the teen 's concern about money during the puerperium.

A few sought to minimize the possibility that their role as mother would be challenged or usurped, and so clarified ahead of time the nature and extent of others' participation in childcare. One 16 year old described her feelings as follows:

> The only thing I didn't want from either my mother or his mother was their telling me "don't do this and don't do that" and "do this and do that." And I told them and I

> don't have any problems...It's my baby and I gotta learn to take care of it because I'm not gonna be with you all the time. I'm gonna be on my own. If you always tell me everything, I'm never gonna learn.

Another teen describes the talk she had with her mother during her pregnancy:

> 'Cause we talked about that in the beginning, that with having someone around and being with her that she didn't want it to get so that we were hating each other. So she's good. She doesn't tell me what to do. She helps. Because I didn't want to live here if it would've gotten like that.

Babycare and reliance upon the family

Once at home with the baby, a heavy reliance upon help from the family, especially mother, seemed to be another major contributant to the teen's relatively smooth transition during the puerperium. Most subjects handled the care of the infant quite appropriately. If they could deal with a problem on their own, they would do so. As mentioned earlier, when faced with a crying baby, they usually went through a process of trial and error to determine what the baby wanted, or reassured themselves that the baby would soon be older and, therefore, easier to handle. However, they were quick to seek help if a problem was not easily resolved, or if they felt unprepared to deal with it in the first place. As one would suspect, the adolescent's own mother was the person the teen usually turned to for any questions she had about the baby.

The teen relied on her family for more than advice. She arrived home with the expectation that she would get a needed respite from babycare whenever necessary, and more often than not, this was indeed the case. There was a remarkable amount of flexibility and sharing

of childcare tasks among the teen, her mother, and other members of the household. There seemed to be no need for a formal clarification of these reponsiblities since everyone seemed to share the assumption that all household members would participate in such things as preparing formula, feeding, changing diapers, bathing, watching and soothing the baby.

Maternal self-image

The self-image of the adolescent as a mother was still in the beginning process of development during the first four weeks home from the hospital. This was evident in comments made by about one-third of the adolescents. They pointed out that they did not "feel" like mothers yet, but rather felt more like babysitters. This was not usually a source of worry for the teen, however. She reasoned that since motherhood was still new to her, the feeling would develop naturally over time.

Another indication that the maternal self-image was still tentative and in the process of forming was the adolescent's reactions to any perceived challenge to her new role. While she relied heavily upon her family to share many of the childcare tasks, it was still important for her to feel that she was primarily responsible for the baby.

As mentioned previously, when the adolescent's performance in her newly acquired role was questioned in any way, this was perceived as stressful, and subsequently gave rise to problems. While most families were able to provide help and advice in a sensitive manner,

others were less cognizant of the need the teen had to feel in control of her baby's care and well-being. Thus, reliance upon family support during the puerperium could be considered successful only if the family, and especially the new grandmother, had sufficient flexibility and sensitivity to the teen's needs to feel competent and in control of the care of her child. Since most of the adolescents did not encounter these kinds of difficulties, however, most felt that they were doing well in their new role. While occasional doubts were expressed, especially after a sleepless night with a hard-to-soothe baby, most felt proud of their mothering abilities.

Maternal pleasure and sensitivity

The majority of the young mothers in this study took a great amount of pleasure and pride in their new infants. They enjoyed spending time with the baby whether it be by direct physical contact or simply by being close enough to gaze at him. They frequently praised the baby, describing him as good, strong, a fast learner, cute, etc., and were pleased whenever they received compliments about him. They also enjoyed seeing others who were close to them, such as family and the fob, play and interact with the baby.

In addition to the evident pleasure these mothers exhibited, most were also sensitive observers of their babies. They noticed many changes that occurred in the baby's abilities during the four weeks home from the hospital, and proudly described how their infant explored and responded to his new world. They were cognizant of

different temperamental characteristics the baby displayed. Any cues which indicated the baby was distressed were usually identified promptly and responded to appropriately. However, this positive portrayal is not meant to indicate that all the adolescents in this study were accurate in their reading of their infants' cues, nor that all their responses were appropriate. Some did, indeed, misinterpret the infant's behavior, as is evident in this 17 year old's statements about her two week old:

> When other people hold him and he's awake, he won't pay attention to them. He watches me. He watches everywhere I go. Like if I'm gonna leave him or something. He always keeps his eyes on me.

A few lacked sensitivity to the baby's needs despite their obvious pleasure in the infant. This was evident when one 16 year old tried to wake her sleeping infant so that I could see how cute she was when she smiled. Although motivated by good intentions, others responded inappropriately to childcare situations, as did one 17 year old who gave her baby chicken soup for his cold, and a 15 year old who tried to share her peppermint stick candy with her two week old.

However, while some did not do well in reading and responding appropriately to the baby's cues, very few of the adolescents felt that this was a problem for them. By the second home visit, those few who had expressed concerns earlier were confident that they were able to read and respond to their infants appropriately.

Relationship with the father of the baby

If the couple was still dating, at times the teen reported that her relationship with the fob had gotten better and that she felt closer to him since the birth. A few were in the process of making plans to either marry or move into their own apartment with their boyfriend. Most, however, perceived very few changes in their relationship. The quality of these relationships ran the gamut, including close, mutually supportive liasons, boyfriends who were on the periphery of things and were merely tolerated by the teens, and relationships characterized by chronic arguing and fighting.

If the adolescent was married to the fob, her husband was a key factor in contributing to how satisfied she was with her new life style and how easily she was able to cope with the demands of motherhood. This was so, even though a number of these women had a good deal of help during the day from family and in-laws during the first few weeks home from the hospital. The husband's help with the house and the baby was important, but the attitude he conveyed while doing those things was of major significance. His willingness to help was interpreted as his sensitivity to the demands with which the new mother had to deal. This was noticed and appreciated by the adolescents, and the lack of this support was clearly problematic, as mentioned in an earlier section.

Relationship with peers

Overall, this was not a major issue for these new mothers during their first month home from the hospital. The overwhelming majority

had friends who were either pregnant or had babies, so few felt different or ostracized from friends because of their circumstances. Since somewhat more than half of the subjects were either still in school or working, they expected to resume their regular contacts with friends as soon as they returned. A few did notice changes in their peer relationships however. Those who moved out of their family's neighborhood because of marriage were more apt to complain of feeling isolated and missed seeing old friends. However, most of the teens in this study had not given much thought to the possibility that the nature of their relationships with peers might change in the future now that they had the responsibilities of motherhood with which to contend.

While peer relationships did not constitute a major source of concern for these young mothers, neither did they provide a major source of support for them. There were exceptions, of course. Some were confidantes to the new mothers during this time. Some friends were particularly valued because of their ability to share their own maternal experiences and feelings with the adolescents. Others provided the teen with some needed socializing and helped reduce her feelings of boredom and isolation. However, for the most part, friends were not frequently mentioned as sources of support during this month, and when they were, the kinds of help they provided were not usually perceived as being of major importance.

Placing the experience in a life perspective

Many of the adolescents were unable to articulate what the

experience of becoming a mother had meant to them. However, a few of the older, more verbal adolescents had developed a personal perspective about the experience which gave it special meaning. The overall feelings these teens conveyed was the sense that they had faced a difficult challenge, were able to deal with it successfully, and had grown personally from the experience. Some of the comments were:

> Adolescent #1: I guess I feel that I can do alot of things I didn't know I could do. I have a lot more strengths than I realized I did. I guess I feel older and I did alot of growing up in a few months.
>
> Adolescent #2: I'm 17 years old and having a baby is making me more mature because I don't have to provide for myself now, I have to provide for the baby too. And I have to not only make decisions for me, but make decisions for him.
>
> Adolescent #3: I guess it's 'cause you're a different person. You got somebody else - usually you have somebody that you can rely on. And all of a sudden you have somebody relying on you. It's different. I don't know. You grow up fast.
>
> Adolescent #4: Well, now that I have him I feel better about myself. You know, now that I have a son, and that's a responsibility and everything. I don't know, I feel alot maturer I guess...To myself, I felt like I grew in mind. You really think about things. Like what if I had an abortion. I just felt better about myself that I didn't. I felt better about myself that I had taken on a responsibility...It's not good for a girl to go through school and have a baby to get more mature, you know. But in a way it's good because it's - you won't be so vulnerable the next time. You learn things.

Problems in maternal adaptation

Eight subjects were having obvious difficulties in their relationships with their infants. Since these problems in adapting to the maternal role are in contrast to what was experienced by the

majority of adolescents in this study, it is worthwhile to briefly describe their behaviors and circumstances.

One adolescent expressed marked ambivalence regarding her baby. She was extremely irritated with the baby's crying and tried to ignore it as best she could, described her in negative terms such as "nasty" and "terrible," and did not enjoy holding or cuddling her. Her ambivalence is expressed in these statements describing her first few days home from the hospital:

> I kept thinking there's something about her that's bothering me. Something bothered me about her - the baby. I'd see her sitting there, and I maybe had the feeling I regretted having her. But I didn't regret having her. And then I realized I felt sorry for her because she's so helpless and she depends on me so much.

She differed from many of the other study subjects in a variety of ways. She was the only teen who had wanted an abortion. She did not follow through on this, however, because her family protested vehemently. They instead suggested adoption as an alternative more suitable to the family. However, while she considered this throughout her pregnancy, she could not go through with giving up the baby. Her relationship with the fob was also a problem. Although he moved in with she and her family two weeks prior to her delivery and expressed a desire to marry her, she refused. Their constant arguing and her feelings of being misunderstood by him led her to the conclusion that marriage would lock her into another undesirable situation. She also lacked the type of peer group that most of the other teens in this study had. Only one of her friends had ever been pregnant and she had had an abortion. She felt that other friends

were judging her critically, thinking she was "stupid" for "saddling" herself with a baby. Thus, a number of circumstances, the strongest undoubtedly being her not wanting the pregnancy, contributed to a negative mother-infant relationship during the puerperium.

Two adolescents reported episodes of wanting to physically harm their infants. For both teens, these instances occurred immediately after a major argument with their boyfriends. Feeling angry, frustrated and depressed, they felt unable to cope with their babies who were crying unconsolably just at that point. One adolescent gave her infant to a younger brother to mind for awhile until she felt more in control. The other adolescent was able to restrain her impulses and, instead, sat with the baby until his fussiness subsided. In addition to having extremely unstable relationships with their boyfriends, both teens lacked supportive family environments. One had been essentially homeless for the past two years since the death of her mother, and was presently living with the fob and his family who were quite controlling and critical of her care of the baby. The other had had chronic family problems, felt like a "burden" to her mother, and was expected to assume total responsibility for her infant with little assistance from the family. Thus, a nonsupportive family environment, coupled with a stressful relationship with the fob, seemed to lead to difficulty coping with the baby, especially when the teen was unable to stop the baby's crying.

Five other adolescents had difficulties adapting to the maternal role, appearing emotionally detached or disinterestd in their babies.

They did not seem to enjoy physical contact with the infant, avoided eye contact with him, did not respond pleasurably to compliments about the baby, and did not respond promptly to the infant's signals of distress. As described earlier, one adolescent's family, especially the mother, had literally taken over control of the baby's care, and the teen felt unable to protest because, among other reasons, her mother was the major provider for the baby. However, possible reasons for this detached behavior were less obvious in the other four situations. These teens were all but unresponsive to the investigator during the hospital and home interviews, and given this attitude it was somewhat curious that they had agreed to participate at all in the study. They offered very little information about their concrete experiences during the first month at home, and virtually nothing related to their thoughts or feelings during this time. In essence, they were disinterested and detached regarding the interviews as well. One might speculate that this behavior was a general coping pattern which these teens were apt to display in interpersonal situations. However, this is speculative at best, since there was little information available about these adolescents' other relationships, or about their behavior under other circumstances.

Statistical relationships

Perceived social support and perceived stress

In order to determine the relationship between perceived social support and perceived stress, the Pearson Product Moment Correlation

was computed between subjects' total scores on the Perceived Social Support Interview and two measures of perceived stress: the Post Partum Stress Questionnaire total score and the childcare stress subcategory score. There were no statistically significant relationships found. Additional correlations to explore whether any of the social support subcategories were related to these measures of perceived stress revealed that greater emotional support correlated .335 (p = .053) with greater childcare stress.

Perceived stress and egocentrism

In order to determine if perceived stress differed based upon the adolescent's degree of egocentrism, the Pearson Product Moment Correlation was computed between subjects' scores on the IAS and two measures of perceived stress: the Postpartum Stress Questionnaire total score, and the childcare stress subcategory score. There were no significant relationships found.

Two items in the Postpartum Stress Questionnaire tapped self-consciousness related specifically to mothering. They are concerned with the adolescent's worry about: "what they/he think(s) about me as a mother" and are found in the subcategories dealing with the teen's relationships with her family and the fob. The relationship between responses to these two items and the subject's childcare stress subcategory score were explored. The presence of worry (coded "yes" if the adolescent sometimes/often worried about either one or both of these; coded "no" if the adolescent never/rarely worried about both) was contrasted with a high (above the mean) versus low

(below the mean) childcare stress score. Using a chi-squared one sample test, the observed frequencies were significantly different at p less than .10, indicating that those who were concerned about what others thought of their mothering were more likely to report higher childcare stress.

Background variables, perceived stress, and social support

For hypothesis-generating purposes, Pearson Product Moment correlations were also performed between the background variables of age, race, SES, living arrangements and: the Postpartum Stress Questionnaire total score and childcare subscore, the Perceived Social Support Interview total score and subcategory scores. The only statistically significant correlation was between age and emotional support (r =.35; p = .043).

DISCUSSION

Prior to discussing the results, it would be useful to note some of the limitations of this research so that the findings may be evaluated within the appropriate context. The data were obtained from a small convenience sample and, as such, cannot accurately be applied to the population of adolescent mothers. However, the purpose of this research was to generate hypotheses for future studies, rather than test hypotheses which could then be generalized. In keeping with this exploratory emphasis, some instruments were used which would not have been appropriate in a study designed for other purposes. Both the Perceived Social Support Interview and the Postpartum Stress Questionnaire were modified for this study, and thus, their psychometric properties are unknown. Therefore, the results which focus on their relationships with other variables must be interpreted cautiously.

In this type of research, the investigator herself may influence the nature of the data, and there are two ways in which this might have occurred in this study. First, in the process of labelling and categorizing qualitative data, the researcher's own biases and preconceived notions can act to influence the final shape of the data. Thus, another investigator could have developed different category schemes than the ones that this writer thought were most

suited for these data. Second, the researcher can act as an artifact, affecting the very process which is under investigation. In this study, I was specifically identified in the Perceived Social Support Interview as a source of emotional support for three subjects, and a source of cognitive support for one subject. It is likely that during the course of the interviews, I provided support to others as well. My availability in this role could have affected how these adolescents may otherwise have coped with their particular concerns. These points should be kept in mind as the results are being evaluated.

This study was undertaken because of the very limited knowledge available to clinicians regarding the stressors adolescent mothers encountered during the puerperium, how they coped with these demands, and what role social support played in this process. This basic descriptive information was also seen as a necessary prerequisite to testing any of the hypothesized relationships outlined in the stress process model presented earlier. It was assumed that adolescents were an important subset of mothers to investigate within this context because of several reasons. First, since adolescents would need to cope, not only with motherhood, but also with the demands of various developmental tasks of adolescence, this situation would be more likely to generate additional perceived stress. Second, because many of the skills and abilities which could affect the stress process are still changing and developing throughout adolescence, the young mother's appraisal of a problem may be negatively affected, and her ability to cope with various stressors may be impaired. Finally,

since these personal resources are not at optimal levels of development, the adolescent mother would be more likely to need to draw heavily upon various kinds of social supports to help her in coping with the problems that new motherhood would present, and yet available supports may not necessarily be adequate to meet such needs.

The first research question of concern in this study involved identifying the adolescent mother's perceived stressors during the first month after discharge from the hospital. The process of becoming a mother during adolescence was conceptualized as a stress event sequence, triggering the activation of other related stressors with which the adolescent may have to cope. In this sample, 13 of these stressors were identified. They were concerns related to: the baby and various aspects of childcare; the responsibilities and limitations brought on by motherhood; body image; interpersonal relations, including those with the adolescent's family, the fob and his family, and peers; and concrete problems such as finances, health, living arrangements, school, and managing the household. Several of these stressors have also been mentioned as being of concern to adult mothers during the early postpartum period. For example, various concerns about the baby and childcare, the restrictions engendered by motherhood, the woman's body image, finances, and managing the housework, have all been cited as frequently-voiced concerns of adult-aged mothers (Bennett, 1981; Hobbs & Cole, 1976; Larsen, 1966; Leifer, 1977; Russell, 1974; Weinberg & Richardson, 1981). However, older mothers seem less

likely to report concerns regarding interpersonal relationships, while most of the adolescents in this sample expressed some degree of worry in this area, especially concerning their relationships with the fob and their family.

Many of the adolescent's concerns regarding family relations stemmed from her feelings of being criticized or questioned regarding her care of the baby. For some, this also involved a fear of their mother's taking over. Since the adolescent is still in a fairly dependent relationship with her family, and since this is often exacerbated by her new circumstances, she may be more sensitized to their negative evaluations of any aspect of her mothering. Further, since many of the teens in this sample lived at home, the very nature of these living arrangements may have contributed to a realistic fear that mother or another female adult may take over the care of the baby. Finally, because the adolescent is still in the midst of establishing a sense of self, her own confidence in her abilities may be more fragile and vulnerable to criticism from significant others. This was also a concern in relation to the fob as well. The adolescent's frequent worries about her relationship with the fob is not too surprising for other reasons, however, especially when the nature of these relationships is considered. Only a few subjects were married, and those that were had done so because of the pregnancy. Many were involved in tenuous commitments and were uncertain of the relationship's future. Those that were not dating had to deal with the issue of their boyfriend's continued involvement with his child. Thus, the very precariousness of these liasons makes

it more likely that adolescents would worry about their relationships with the fob more so than adults who, at least on the surface, are involved in more stable commitments.

While the above 13 issues were viewed as stressors by the teens, for the most part, they did not reach major proportions. This was contrary to the investigator's expectations, based upon the assumptions outlined earlier in this section. For the majority of this sample, the puerperium was not overly stressful, but rather was a time of challenge and joy, when the overriding feeling was one of pleasure in the new baby. This finding is similar to recent studies in the adult literature, indicating that while there are a host of problems and changes with which new mothers must cope during their transition to parenthood, most do not consider this to be an overwhelmingly stressful time reaching crisis proportions (Russell, 1974; Hobbs & Cole, 1976).

A closer examination of the data provided some clues as to why this may have been so for these adolescents. Many made anticipatory preparations prior to the birth which reduced the likelihood of problems arising, or if they did arise, minimized their impact. In addition, most had had at least some past experience with childcare, and so had acquired some knowledge and skills which could be used in caring for their own baby. Finally, a major resource contributing to their relative ease in dealing with this transition was their heavy reliance upon help from family members. As mentioned earlier, the adolescent's ability to draw upon adequate social supports to bolster her own efforts at coping with the problems engendered by motherhood

would seem to be essential, based upon the inadequacy of personal resources during this stage of development.

The second research question of concern in this study involved exploring the coping strategies used by the adolescent mother in response to perceived stressors. Coping was conceptualized as a multidimensional construct, comprised of a variety of behaviors and thoughts, having the dual functions of dealing with the problem, in addition to managing stress-related emotions. Coping was viewed as a process rather than an enduring trait, and thus was measured by determining how the subject responded in specific situations that were perceived as stressful. Findings indicated that different strategies were preferred, based upon the nature of the stressor. Thus, similar to what was found in Colletta's study (Colletta et al., 1981), problem-focused strategies seemed to be preferred in response to concrete problems such as concerns about health, finances, school and living arrangements. Emotion-focused strategies seemed to be used more often when dealing with interpersonal problems, especially with the teen's family and the fob. As has been suggested by others (Folkman & Lazarus, 1980), if an individual thinks a situation cannot be changed, but rather must be endured or tolerated, he may be more likely to avoid futile actions directed toward trying to deal with the problem, and focus instead upon dealing with his distress over the situation. If the adolescent appraised her probems with her family or fob in this light, this may have led to the preferred use of emotion-focused coping in dealing with these situations. Unfortunately, the subjects' appraisals of these situations, in terms

of whether they were considered to be amenable to change, were not systematically assessed.

As others have found in past research with adolescent mothers (Colletta et al., 1981; Furstenberg & Crawford, 1978; Presser, 1980), a major mode of coping used by this sample involved turning to others, especially the family, for help. When dealing directly with the problem, these subjects sought others' concrete assistance to tackle the situation, sought out information or advice from others, observed others to learn more about how to handle a situation, and thought of plans to deal with problems which involved receiving help from others. In dealing with stress-related emotions, they shared their feelings or sought reassurance from others, and asked others for help so they could get away from the demands of childcare for awhile and regain control of their frustrations.

Turning to others, especially to mother, for information and direct assistance was a major way these adolescents coped with their concerns regarding the baby and babycare. This is not unexpected for two reasons. First, the nature of the situation was such that novel experiences were presented to the new mother, despite her past experience with caring for others' children. A common response to a novel situation is to seek out information and assistance which will enable the individual to deal with the problem. Second, problem-solving abilities are still in the formative stages during adolescence. Thus, the adolescent may be more in need of relying upon others for help than an adult who has a broader array of skills which can be mobilized to deal with a problem. Interestingly enough,

however, the adolescents in this sample were also able to generate a variety of responses on their own to deal with babycare problems, and this may have been partly due to their past experiences with childcare.

The third research question of concern in this study involved exploring the adolescent mother's perceived social supports during the puerperium. Social support was also conceptualized as a multidimensional construct. The teens' subjective assessments of the availability and adequacy of various types of support in actual situations were measured. Various sources of social support were considered in order to explore the possibility that different relationships are apt to offer different types of support as Weiss (1974) has suggested.

The adolescent's mother, in addition to her family, was her most important source of tangible support during the puerperium. A major component of this type of support was the shared childcare that took place. This had been identified as a frequent occurrence in lower status black households (Presser, 1980; Stack, 1975), and was found to exist in this study among white adolescents living at home as well. The adolescent's mother was also key in providing her with cognitive support. However, advice needed to be offered in a manner which also conveyed a sense of respect for the adolescent's new status as mother. If the teen felt she was being told what to do, rather than being offered a suggestion, her fragile self-image as a mother seemed to be threatened, and the advice was not viewed as helpful.

Similar to what was found by Mercer (1980), the adolescent's mother was also her major source of social reinforcement. The grandmother's praise and approval regarding her daughter's role performance did much to bolster the teen's image of herself as a competent and capable new mother. The fob was also important in this capacity. His confidence in her maternal abilities was a great source of reassurance to the adolescent, while his criticism of her care was not responded to lightly.

The fob was the major source of emotional support to the teens in this study. He played an especially important role in how the married adolescent dealt with her first month at home with the baby. Despite a major amount of tangible and cognitive assistance from mother and family, the married adolescent still considered the help and understanding she received from her husband as a major factor in her being able to handle the demands of new motherhood. When this was absent, the adolescent appeared overwhelmed and unhappy.

Peers did not play an especially important role during this month, either as sources of stress or of support. Loss of friends and subsequent feelings of isolation from peers have been identified in previous research as major concerns of mothers who had their first child during adolescence (Cannon-Bonventre & Kahn, 1979). However, the present study suggests that the impact of these changes do not occur until some time after the birth of the child.

The fourth research question involved exploring the relationship between perceived social support and perceived stress. Greater emotional support was associated with greater childcare stress. This

unexpected positive correlation between stress and social support was also found by Carveth and Gottlieb (1979) in their study of new mothers. Their suggested explanation for this finding is applicable to this study. With cross-sectional evaluations, a positive relationship between these two variables may reflect the increased use of social support during a time of mounting stress. Longitudinal measures are more apt to reflect the expected inverse correlation between earlier use of support and later measures of perceived stress. Since the measures in this study were obtained during the puerperium, an early stage of adapting to motherhood, this positive correlation is probably reflecting the adolescent's increased use of emotional support as an initial means of coping with her concerns about the baby. If an assessment of childcare stress was to be repeated at a later point in the stress process, the inverse correlation should be observed at that time.

Since the role of developmental factors has been largely overlooked in studies concerning adolescent mothers and the stress process, the fifth research question involved exploring the relationship between adolescent egocentric thought and perceived stress. The expected positive relations were not found. One possible explanation for this may be that the measure of egocentrism was not specific to the area of self-consciousness pertinent to this study. The IAS focuses mainly upon self-consciousness regarding physical appearance and, to a much less degree, school performance. However, adolescent egocentrism is a multifaceted construct (Enright et al., 1979). A different operationalization, therefore, may

produce different results. Some support for this explanation is provided by the positive relationship which was found between perceived childcare stress and two items in the Postpartum Stress Questionnaire reflecting maternal self-consciousness. While this cannot be taken as more than suggestive, it does raise the issue of whether a more specific operationalization of the construct may be worth pursuing in future research.

Another possible explanation for the lack of expected correlations could be due to the psychometric properties of the instrument itself. Both alpha coefficients and test-retest reliability coefficients for the IAS were not very high (.63 and .65 respectively), and this may have minimized the likelihood of discovering relationships in such a small sample.

Finally, the construct of egocentrism may not be the developmental variable most likely to affect the stress process in a significant manner. It may be more worthwhile in future studies to consider the effects of other developmental factors, such as problem-solving abilities, for example, upon this process.

Other personal and environmental characteristics evaluated in this study which could have influenced the stress process included race, age, SES, and living arrangements. The older the teen, the more likely she was to report having received greater emotional support. More of the older adolescents were either married or involved in more stable relationships with the fob. Since he was mentioned most often as the major source of emotional support, this could be the reason for the association between age and this type of

support.

No other relationships were found between these background characteristics and either stress or social support measures. This could have been due to the restricted range of some of these variables, such as age for example, or because of the use of measures with questionable reliability and validity.

Approximately one-fourth of the adolescents in this study demonstrated some difficulties in adapting to the maternal-infant relationship. An unwanted pregnancy and the lack of adequate supports seemed to be major contributants in some cases. For others, the reasons were not identifiable. Five adolescents presented pictures of detachment and disinterest in their infants. One of the teens who dropped out of the study after the first home visit also displayed this apathy. It is possible that this behavior reflected these subjects' coping with their feelings about motherhood by emotionally insulating themselves from feelings of attachment to the baby. However, based on the information from this study, this is speculative at best.

Before considering directions for future research, a fundamental question should be considered based upon the overall results. That is, given the apparent lack of perceived stress, and the natural support systems which were effectively mobilized to assist the coping of the majority of adolescents in this sample, does motherhood in an adolescent present a major clinical problem which should be of concern to nursing? Unfortunately, due to the nature of this study, a definitive answer to this question cannot be provided.

First, since the sampling procedure did not allow for a random and representative group of subjects, it raises the possibility that this sample may have been skewed toward a group whose characteristics made them less likely to encounter major problems. Specifically, three of the five adolescents who refused to participate in the study seemed to be experiencing problems during the in-hospital interview. Further, most of these subjects were 17 or 18 years old, and approximately one-fifth had already graduated from high school. A younger group of teens may not only have had more perceived stress in these circumstances, but also may have been worried about a very different set of problems. Also, over half of the subjects were enrolled in a special adolescent maternity program. However, it is unlikely that their participation accounted for the lack of stress noted since their responses did not differ significantly from the other adolescents in the sample.

Second, this research focused upon the immediate postpartum period. It is possible that this time frame may have encompassed a "honeymoon" period for the adolescents and their families; that is, a time when the excitement caused by the birth and the new member of the household predominates, and family members are eager to help. A long-term view of the situation may be more likely to reveal mounting stress when this newness and excitement fades. Indeed, in Mercer's small sample (1980), negative or rejecting feelings about motherhood were not expressed by the adolescents before one month postpartum, although the teen's perceived rewards did increase as the infant's sociability increased over time.

Third, since no systematic assessments of maternal adaptation were made, a major piece of relevant information is missing. For example, it may be that adaptation in the form of maternal-infant interactions is impaired as some empirical evidence indicates, but this may be a function of other personal or environmental characteristics, rather than a function of what this investigator conceptualized as most relevant to this study.

Based on these considerations, it would be worthwhile for future research in this area to develop in certain directions. A long-term study of a broader age group of adolescents should be undertaken. If data collection begins during pregnancy and continues well into the first year postpartum, it would be possible to evaluate whether those teens who used anticipatory coping strategies prior to the birth experience had less perceived stress after delivery. Changes in key constructs which are bound to occur could be assessed over time. Their relationships to various indicators of maternal adaptation could also be evaluated at several points throughout the first postpartum year. If this were undertaken, it would be possible to determine if the three major constructs of this research are, indeed, related to the adolescent's adaptation to motherhood, to what extent these relationships exist, and in what direction. This latter consideration must remain an open question since there has been some suggestion in the literature that while heavy reliance upon the family may be helpful early on, there may be a price it exacts later (Furstenberg, 1979; Stack, 1975). Assessments of various developmental indicators, in addition to egocentrism, should also be

included in order to assess their impact upon other key variables. This type of investigation would be a necessary prerequisite to any intervention study which could develop from this line of research.

More work is necessary regarding measurement of the coping process. In this research, self-reports were used as the sole means of assessing coping. However, a problem with this involved the subsequent lack of information regarding a major defense mechanism, i.e., denial. As has been suggested by Lazarus (1980), future assessments of this construct should include both self-report and observations to supplement information that cannot be supplied by either technique alone.

Another measurement issue concerns the need for an instrument which reflects egocentrism as it specifically relates to self-consciousness regarding mothering. This scale development could then allow for a more valid assessment of this construct's role in the adolescent's adaptation to motherhood. Other psychosocial developmental factors which may affect the stress process are also sorely in need of exploration, and should be included in future research with this population.

There is a need for more information regarding the small group of patients who appeared detached from their infants. Is this an interaction pattern that continues over time? Are there personal and environmental factors which contribute to its occurrence? Can these adolescents be identified prior to the birth of the baby? Is it a pattern of behavior that is amenable to intervention? Answers to all of these questions would help in understanding the nature and

significance of this observation.

Finally, specific hypotheses which were raised by this study are worthy of future investigation. Many are more specific restatements of the relationships outlined in the conceptual model which guided the design of this study, and will be referred to whenever applicable. (See Figure 1.)

The hypotheses related to appraisal are:

1. past childcare experience is related to a more benign appraisal of potential concerns regarding the care of the infant. (Arrow 10)

2. concrete problems are more likely to be appraised as being more amenable to change than are interpersonal problems. (Arrow 8)

The hypotheses related to social support are:

1. the expectation during pregnancy of adequate tangible and cognitive supports during the puerperium will lead to a more benign appraisal of potential concerns related to childcare, babysitting and school. (Arrow 5)

2. during the puerperium, the use of greater emotional support will be associated with a more negative appraisal of childcare concerns and the responsibilities of motherhood. (Arrow 5)

3. the use of greater emotional support during the puerperium will be associated with a more benign appraisal of childcare concerns and the responsibilities of motherhood at a later time during the first postpartum year. (Arrow 5)

4. during the puerperium, less perceived tangible support will be related to a more negative appraisal of concerns regarding

childcare and babysitting. (Arrow 5)

5. the adolescent's mother is the most important source of social reinforcement during the puerperium for those teens living at home.

6. the adolescent's husband is the most important source of social reinforcement during the puerperium for married adolescents living away from home.

7. the adolescent's mother is her most important source of tangible and cognitive support during the puerperium.

The hypotheses related to coping are:

1. more emotion-focused than problem-focused strategies will be used to cope with interpersonal problems during the puerperium.

2. more problem-focused than emotion-focused strategies will be used to cope with concrete problems during the puerperium.

3. problem-focused direct action coping strategies prior to delivery will be associated with a more benign appraisal of school and financial concerns during the puerperium. (Arrow 6)

4. emotion-focused intrapsychic coping strategies will be used to lessen distress regarding childcare during times when concrete assistance from family or husband is not available. (Arrow 4)

The hypothesis related to egocentrism is:

1. greater self-consciousness regarding mothering abilities will be associated with a more negative appraisal of childcare concerns. (Arrow 10)

The hypotheses related to maternal competence are:

1. greater perceived social reinforcement from the adolescent's

family and/or husband will be associated with her greater sense of maternal competence. (Arrow 3)

2. greater perceived family criticism of the adolescent's care of the baby will be associated with her lesser sense of maternal competence. (Arrow 1)

The hypothesis related to maternal-infant interactions is:

1. adolescents most at risk of problems in maternal-infant interactions are those: whose pregnancy and baby are unwanted, who have tenuous relationships with the fob characterized by fighting and arguing, and who are in nonsupportive family environments. (Arrows 1 and 3)

Clinical Nursing Implications

The clinical nursing implications which can be drawn from this study must be highly tentative due to its design limitations and the small sample size. However, some recommendations for clinical practice can be cautiously offered. Clinicians may be able to help the adolescent mother avoid some initial distress and problems if they encourage her to make anticipatory preparations prior to delivery, especially in the areas of childcare, role clarification, babysitting, school, and finances. Some adolescents may be unaware of alternatives that are available to help them with these potential problem areas, and the nurse can provide this necessary information early in pregnancy, helping the teen explore her options for handling these issues.

The nurse can also offer the adolescent preparatory information

regarding stressors she is most likely to encounter during the puerperium. However, as pointed out earlier, this type of intervention may actually cause some increase in anxiety for certain individuals who prefer to avoid thinking about an upcoming stressor. If preparatory information is offered, however, the problem- and emotion-focused coping strategies which the adolescent could use in response to such stressors should also be explored. This may serve to enhance the adolescent's feelings of control and thus diminish potential anxiety about some of the difficulties she may encounter during early motherhood. Training in the use of various coping strategies may also contribute to her successful handling of problems as they arise during the puerperium. It would be useful for the clinician to remember that any information or advice that is offered to the teen be done in a manner which conveys a sense of respect for her new status as mother, and for her right to either accept or reject such suggestions.

The social support that the teen can expect from her family should be a major area of assessment prior to delivery, since a key method of coping for the adolescent mother is to turn to others, especially the family, for help. If it appears that family members will not be able to provide the adolescent with needed assistance, the nurse can assist her in exploring alternate sources of support. The nurse, herself, may need to be more active in this type of situation, by directly providing the teen with different kinds of support than she might to another adolescent mother with adequate family resources.

Finally, the importance of working along with the family, especially the adolescent's own mother, cannot be overstated. The adolescent's kin are her most important source of information and assistance regarding the baby. It would be self-defeating and potentially damaging to the nurse's relationship with the adolescent to minimize or ignore the importance of this source of support to the young mother. Clinicians should begin to explore various ways of providing care to the adolescent mother which recognizes and includes her family as an integral component of this process.

APPENDIX

INSTRUMENTS

Potential Stressors Reviewed During Home Visit

1. managing the household; doing chores
2. school and homework
3. employment
4. finances
5. living arrangements
6. babysitting
7. getting out of the house
8. relationships with family, father of the baby, and friends
9. perceptions of self as a mother
10. perceptions of how others see her as mother
11. cue identification and interpretation
12. physical appearance
13. baby's health
14. adolescent's health
15. postpartum depression or "baby blues"

Perceived Social Support Interview

Please list all the people who have been important to you in some way during the past four weeks: people you have had some sort of contact with during this time - either seen or talked to on the phone - and who have been helpful to you in some way. So, you can include family, other adults, professionals, friends, boyfriend, etc.:

FIRST NAME RELATIONSHIP TO YOU

For each source listed, the adolescent was asked the following questions by the interviewer:

1. How has (s)he been helpful to you the past four weeks? Why has (s)he been good to have around?

2. For each type of interaction mentioned, the adolescent was then asked:

(a) How important was this type of interaction to you? (slightly, moderately, very)

(b) Would you have preferred more or less of this type of help, or was it about right?

After the adolescent exhausted all examples of support on her own, the following questions were asked for each source listed if that type of social support was not already discussed:

Adapted from Hirsch, B. J. Natural social supports and coping with major life changes. American Journal of Community Psychology, 1980, 8, 159-172.

1. Social reinforcement: During the past four weeks, did (s)he ever praise you about things you've been doing? If not, did (s)he ever let you know (s)he approved of things you've been doing without saying it to you directly? Give examples.

2. Emotional support: During the past four weeks, have you talked with ---- when you've had something on your mind? When you've felt either lonely, or upset, or under pressure, did (s)he ever make you feel better by talking with you, offering you reassurance, or showing (s)he was concerned? Give examples.

3. Tangible support: During the past four weeks, did (s)he ever give you different kinds of help, such as giving you things, or doing things for you? Give examples.

4. Cognitive support: During the past four weeks, did (s)he ever give you any advice, suggestions, or explanations about anything you were wondering about, or did (s)he actually show you how to do something? Give examples.

5. Socializing: During the past four weeks, did (s)he visit or socialize with you? Give examples.

For each of the above categories of social support, the adolescent was asked the following:

(a) How important was this type of help to you? (slightly, moderately, very)

(b) Would you have preferred more or less of this type of help, or was it about right?

Imaginary Audience Scale

Instructions: Please read the following stories carefully and assume that the events actually happened to you. Place a check next to the answer that best describes what you would do or feel in the real situation.

1. You have looked forward to the most exciting dress up party of the year. You arrive after an hour's drive from home. Just as the party is beginning, you notice a grease spot on your trousers or skirt. (There is no way to borrow clothes from anyone.) Would you stay or go home?

   Go home.
   Stay, even though I'd feel uncomfortable.
   Stay, because the grease spot wouldn't bother me.

2. Let's say some adult visitors came to your school and you were asked to tell them a little bit about yourself.

   I would like that.
   I would not like that.
   I wouldn't care.

3. It is Friday afternoon and you have just had your hair cut in preparation for the wedding of a relative that weekend. The barber or hairdresser did a terrible job and your hair looks awful. To make it worse, that night is the most important basketball game of the season and you really want to see it, but there is no way you can keep your head covered without people asking questions. Would you stay home or go to the game anyway?

   Go to the game and not worry about my hair.
   Go to the game and sit where people won't notice me very much.
   Stay home.

4. If you went to a party where you did not know most of the kids, would you wonder what they were thinking about you?

   I wouldn't think about it.
   I would wonder about that a lot.
   I would wonder about that a little.

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Elkind, D., and Bowen, R. Imaginary audience behavior in children and adolescents. Developmental Psychology, 1979, 15, 38-44.

5. You are sitting in class and have discovered that your jeans have a small but noticeable split along the side seam. Your teacher has offered extra credit toward his/her course grade to anyone who can write the correct answer to a question on the blackboard. Would you get up in front of the class and go to the blackboard, or would you remain seated?

   Go to the blackboard as though nothing had happened.
   Go to the blackboard and try to hide the split.
   Remain seated.

6. When someone watches me work...

   I get very nervous.
   I don't mind at all.
   I get a little nervous.

7. Your class is supposed to have their picture taken but you fell the day before and scraped your face. You would like to be in the picture but your cheek is red and swollen. Would you have your picture taken anyway or stay out of the picture?

   Get your picture taken even though you'd be embarrassed.
   Stay out of the picture.
   Get your picture taken and not worry about it.

8. One young person said, "When I'm with people I get nervous because I worry about how much they like me."

   I feel like this often.
   I never feel like this.
   I feel like this sometimes.

9. You have been looking forward to your friend's party for weeks, but just before you leave for the party your mother tells you that she accidently washed all your good clothes with a red shirt. Now all your jeans are pink in spots. The only thing left to wear are your jeans that are too big and too baggy. Would you go to the party or would you stay home?

   Go to the party, but buy a new pair of jeans to wear.
   Stay home.
   Go to the party in either the pink or baggy jeans.

10. Suppose you went to a party that you thought was a costume party but when you got there you were the only person wearing a costume. You'd like to stay and have fun with your friends but your costume is very noticeable. Would you stay or go home?

    Go home.
    Stay and have fun joking about your costume.

Stay, but try to borrow some clothes to wear.

11. Let's say you wrote a story for an assignment your teacher gave you, and she asked you to read it aloud to the rest of the class.

    I would not like that at all.
    I would like that but I would be nervous.
    I would like that.

12. If you were asked to get up in front of the class and talk a little bit about your hobby...

    I wouldn't be nervous at all.
    I would be a little nervous.
    I would be very nervous.

Postpartum Stress Questionnaire

The care of a first child can be an enjoyable but sometimes frustrating experience. I would like to find out how this first month of childcare has gone for you.

Employment

How often since your baby was born have you worried about the following job concerns? (Please circle the choice which best describes how often you have worried. If any concerns don't apply to you, circle "never").

	OFTEN	SOMETIMES	RARELY	NEVER
1. Keeping my job	4	3	2	1
2. Missing work days	4	3	2	1
3. Finding a job	4	3	2	1
4. Other (write in)	4	3	2	1

Overall, how worried have you been about job related matters since your baby was born? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Adapted from Olds, D. The pregnancy stress and support interview. Unpublished manuscript, 1979. (Available from Comprehensive Interdisciplinary Developmental Services, 318 Madison Avenue, Elmira, New York 14901).

Education

How often since your baby was born have you worried about the following school concerns? (Circle answer)

	OFTEN	SOMETIMES	RARELY	NEVER
1. Finishing my education	4	3	2	1
2. Missing school days	4	3	2	1
3. Other (write in)	4	3	2	1

Overall, how worried have you been about school-related matters since your baby was born? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Living Arrangements

How often since your baby was born have you worried about matters related to your living arrangements? (Circle answer)

	OFTEN	SOMETIMES	RARELY	NEVER
1. Physical safety of home	4	3	2	1
2. Problems with heating	4	3	2	1
3. Having enough room in home	4	3	2	1
4. Problems with landlord	4	3	2	1
5. Other (write in)	4	3	2	1

Overall, how worried have you been about your living arrangements since your baby was born? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Housing Location

How often since your baby was born have you worried about the following matters related to your housing location? (Circle answer)

		OFTEN	SOMETIMES	RARELY	NEVER
1.	Availability of transportation	4	3	2	1
2.	Distance I live from friends/relatives	4	3	2	1
3.	Distance I live from shopping areas	4	3	2	1
4.	Neighborhood	4	3	2	1
5.	Other (write in)	4	3	2	1

Overall, how worried have you been about your housing location since your baby was born? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Finances

How often since your baby was born have you worried about the following financial matters? (Circle answer)

		OFTEN	SOMETIMES	RARELY	NEVER
1.	Housing costs (rent, mortgage, etc.)	4	3	2	1
2.	Money for car payments or repairs	4	3	2	1
3.	Money for food	4	3	2	1
4.	Medical bills due to the baby	4	3	2	1
5.	Money for baby supplies	4	3	2	1
6.	Money for health insurance	4	3	2	1
7.	Child care costs (such as babysitting)	4	3	2	1
8.	Other (write in)	4	3	2	1

Overall, how worried have you been about your finances? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Babysitting

How often since your baby was born have you worried about the following matters related to babysitting? (Circle answer)

	OFTEN	SOMETIMES	RARELY	NEVER
1. Having someone to babysit if I want to go out	4	3	2	1
2. Having someone to babysit when I'm at work	4	3	2	1
3. Having someone to babysit in an emergency	4	3	2	1
4. Having someone to babysit when I'm really having trouble with the child and at my wits end	4	3	2	1
5. Being able to locate a babysitter	4	3	2	1
6. Other (write in)	4	3	2	1

Overall, how worried have you been about babysitting? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Taking Care of My Baby

How often since your baby was born have you worried about the following topics related to his/her care? (Circle answer)

		OFTEN	SOMETIMES	RARELY	NEVER
1.	Knowing how to quiet my baby when he/she cries	4	3	2	1
2.	Knowing how to feed my baby	4	3	2	1
3.	Being responsible for my baby all the time	4	3	2	1
4.	Wondering if I'm doing a good job of being a mother	4	3	2	1
5.	Taking care of my baby if he or she is sick	4	3	2	1
6.	Taking care of my baby when I am tired or not feeling well	4	3	2	1
7.	Getting angry at my baby	4	3	2	1
8.	Hurting my baby	4	3	2	1
9.	Spoiling my baby	4	3	2	1
10.	Giving my baby enough loving care	4	3	2	1
11.	Other (write in)	4	3	2	1

Overall, how worried have you been about your taking care of your baby? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Your Feelings About Yourself

Since your baby was born, how often have you worried about the following things concerning yourself?

		OFTEN	SOMETIMES	RARELY	NEVER
1.	The way I look	4	3	2	1
2.	Having to depend on others	4	3	2	1
3.	Not being able to get out of the house as much as I would like	4	3	2	1
4.	Not being able to see my friends or do other things I like	4	3	2	1
5.	Wondering whether others still care about me	4	3	2	1
6.	People giving me advice about how to raise my baby	4	3	2	1
7.	Being bored	4	3	2	1
8.	Being moody	4	3	2	1
9.	Having too many things to do	4	3	2	1
10.	Other (write in)	4	3	2	1

Overall, how worried have you been about the things listed above (your looks, being moody, etc.)? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Relationship with Husband/Boyfriend

How often since your baby was born have you wished your husband/boyfriend would:

		OFTEN	SOMETIMES	RARELY	NEVER
1.	Help more with baby	4	3	2	1
2.	Show more interest in baby	4	3	2	1
3.	Let me take care of my baby my way	4	3	2	1
4.	Help me more around the house	4	3	2	1
5.	Other (write in)	4	3	2	1

Overall, how worried have you been about your husband/boyfriend's willingness to help with the baby or house?

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

How often since your baby was born have you worried about the following topics related to husband/boyfriend?

		OFTEN	SOMETIMES	RARELY	NEVER
1.	His understanding of me	4	3	2	1
2.	His yelling or screaming at me	4	3	2	1
3.	His hitting or physically hurting me	4	3	2	1
4.	The amount of interest he shows in me	4	3	2	1
5.	The amount of time he spends with me	4	3	2	1
6.	What he thinks of me as a mother	4	3	2	1

Overall, how worried or concerned have you been about your personal relationship with your husband/boyfriend?

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

Relationship with Family

How often since your baby was born have you worried about the following things related to your family? (Circle answer)

	OFTEN	SOMETIMES	RARELY	NEVER
1. What they think of me as a mother	4	3	2	1
2. Letting me take care of my baby my way	4	3	2	1
3. Having to depend on them for help	4	3	2	1
4. Their accepting and loving the baby	4	3	2	1
5. Getting along with them	4	3	2	1
6. Other (write in)	4	3	2	1

Overall, how worried have you been about things related to your family since your baby was born? (Circle answer)

NOT WORRIED AT ALL	WORRIED A LITTLE	FAIRLY WORRIED	WORRIED A LOT	EXTREMELY WORRIED
1	2	3	4	5

REFERENCES

Adams, G. R., and Jones, R. M. Imaginary audience behavior: A validation study. Journal of Early Adolescence, 1981, 1, 1-10.

Adams, G. R., and Jones, R. M. Adolescent egocentrism: Exploration into possible contributions of parent-child relations. Journal of Youth and Adolescence, 1982, 11, 25-31.

Andrews, G., Tennant, C., Hewson, D. M., and Vaillant, G. E. Life event stress, social support, coping style, and risk of psychological impairment. Journal of Nervous and Mental Disease, 1978, 166, 307-316.

Bachman, J. G., O'Malley, P. M., and Johnston, J. Youth in transition: Adolescence to adulthood - change and stability in the lives of young men. Ann Arbor: Institute for Social Research, 1978.

Baldtree, K. S., Murphy, S. P., and Powers, M. J. Stress identification and coping patterns in patients on hemodialysis. Nursing Research, 1982, 31, 107-112.

Baldwin, W. Adolescent pregnancy and childbearing - An overview. Seminars in Perinatology, 1981, 5, 1-8.

Baldwin, W., and Cain, V. S. The children of teenage parents. Family Planning Perspectives, 1980, 12, 34-43.

Bennett, E. A. Coping in the puerperium: The reported experience of new mothers. Journal of Psychosomatic Research, 1981, 25, 13-21.

Berkman, L. F., and Syme, S. L. Social networks, host resistance, and mortality: a nine-year follow-up study of Alameda county residents. American Journal of Epidemiology, 1979, 109, 186-204.

Billings, A. G., and Moos, R. H. The role of coping responses and social resources in attenuating the stress of life events. Journal of Behavioral Medicine, 1981, 4, 139-157.

Blos, P. On adolescence. New York: The Free Press, 1962.

Brandt, P. A., and Weinert, C. The PRQ - A social support system. Nursing Research, 1981, 30, 277-280.

Byrne, D. The repression-sensitization scale: Rationale, reliability, and validity. Journal of Personality, 1961, 29, 334-349.

Cannon-Bonventre, K., and Kahn, J. R. The ecology of help-seeking behavior among adolescent parents. Massachusetts: American Institutes for Research, January 1979.

Caplan, G. Support systems and community mental health. New York: Behavioral Publications, 1974.

Caplan, G. Mastery of stress: Psychosocial aspects. American Journal of Psychiatry, 1981, 138, 413-420.

Card, J. J., and Wise, L. L. Teenage mothers and teenage fathers: The impact of early childbearing on the parents' personal and professional lives. Family Planning Perspectives, 1978, 10, 199-205.

Carveth, W. B., and Gottlieb, B. H. The measurement of social support and its relation to stress. Canadian Journal of Behavioral Science, 1979, 11, 179-188.

Cassel, J. Psychosocial processes and "stress": Theoretical formulation. International Journal of Health Services, 1974, 4, 471-482.

Chandler, M. J. Egocentrism and antisocial behavior: The assessment and training of social perspective-taking skills. Developmental Psychology, 1973, 9, 326-332.

Cleary, P. J. A checklist for life event research. Journal of Psychosomatic Research, 1980, 24, 199-207.

Cobb, S. Social support as a moderator of life stress. Psychosomatic Medicine, 1976, 38, 300-312.

Coelho, G. V., Hamburg, D. A., and Murphey, E. B. Coping strategies in a new learning environment. Archives of General Psychiatry, 1963, 9, 433-443.

Cohen, F. Personality, stress, and the development of physical illness. In G. C. Stone, F. Cohen, and N. E. Adler (Eds.), Health psychology - A handbook. California: Jossey-Bass, 1979.

Cohen, F. Stress and bodily illness. Psychiatric Clinics of North America, 1981, 4, 269-286.

Cohen, F., and Lazarus, R. S. Coping with the stresses of illness. In G. Stone, F. Cohen, and N. Adler (Eds.), Health psychology - A handbook. California: Jossey-Bass, 1979.

Colletta, N. D. Social support and the risk of maternal rejection by adolescent mothers. The Journal of Psychology, 1981, 109, 191-197.

Colletta, N. D., and Gregg, C. H. Adolescent mothers' vulnerability to stress. The Journal of Nervous and Mental Disease, 1981, 169, 50-54.

Colletta, N. D., Hadler, S., and Gregg, C. H. How adolescents cope with the problems of early motherhood. Adolescence, 1981, 16, 499-512.

Cooley, E. J., and Keesey, J. C. Relationship between life change and illness in coping versus sensitive persons. Psychological Reports, 1981, 48, 711-714.

Crnic, K. A., Greenberg, M. T., Ragozin, A. S., Robinson, N. M., and Basham, R. The effects of stress and social support on maternal attitudes and the mother-infant relationship. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Boston, April 1981. (a)

Crnic, K. A., Greenberg, M. T., Ragozin, A. S., Robinson, N. M., and Basham, R. The effects of life stress and social support on mothers of newborn infants. Manuscript submitted for publication, 1981. (b)

Crockenberg, S. B. Infant irritability, mother responsiveness, and social support influences on the security of infant-mother attachment. Child Development, 1981, 52, 857-865.

Dean, A., and Lin, N. The stress-buffering role of social support. The Journal of Nervous and Mental Disease, 1977, 165, 403-417.

De-Nour, A. K. Adolescents' adjustment to chronic hemodialysis. American Journal of Psychiatry, 1979, 136, 430-433.

Dimond, M. Social support and adaptation to chronic illness: The case of maintenance hemodialysis. Research in Nursing and Health, 1979, 2, 101-108.

Dohrenwend, B. S., and Dohrenwend, B. P. Some issues in research on stressful life events. The Journal of Nervous and Mental Disease, 1978, 166, 7-15.

Donaldson, N. E. The postpartum follow-up nurse clinician. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 1981, 10, 249-254.

Elkind, D. Egocentrism in adolescence. Child Development, 1967, 38, 1025-1033.

Elkind, D., and Bowen, R. Imaginary audience behavior in children and adolescents. Developmental Psychology, 1979, 15, 38-44.

Enright, R. D., Lapsley, D. K., and Shukla, D. G. Adolescent egocentrism in early and late adolescence. Adolescence, 1979, 14, 687-695.

Epstein, A. S. Assessing the child development information needed by adolescent parents with very young children. Michigan: High Scope Educational Research Foundation, 1980.

Field, T. M. Interactions of preterm and term infants with their lower- and middle-class teenage and adult mothers. In T. M. Field (Ed.), High-risk infants and children. New York: Academic Press, 1980.

Finlayson, A. Social networks as coping resources. Social Science Medicine, 1976, 10, 97-103.

Folkman, S., and Lazarus, R. S. An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 1980, 21, 219-239.

Forbush, J. Adolescent parent programs and family involvement. Washington, D. C.: Family Impact Seminar, 1979.

Fox, D. J. Fundamentals of Research in Nursing (3rd ed.). New York: Appleton-Century-Crofts, 1976.

Freud, A. The ego and the mechanisms of defense. New York: International Universities Press, 1946.

Furstenberg Jr., F. F. Burdens and benefits: The impact of early childbearing on the family. Washington, D. C.: Family Impact Seminar, 1979.

Furstenberg Jr., F. F., and Crawford, A. G. Family support: Helping teenage mothers to cope. Family Planning Perspectives, 1978, 10, 322-333.

Gal, R., and Lazarus, R. S. The role of activity in anticipating and confronting stressful situations. Journal of Human Stress, 1975, 1, 4-20.

Goldstein, M. J. Individual differences in response to stress. American Journal of Community Psychology, 1973, 1, 113-137.

Gottlieb, B. H. The contribution of natural social supports to primary prevention among four social subgroups of adolescent males. Adolescence, 1975, 10, 207-220.

Haan, N. Coping and defending: Processes of self-environmental organization. New York: Academic Press, 1977.

Hamburg, B. A. Early adolescence: A specific and stressful stage of the life cycle. In G. V. Coelho, D. A. Hamburg, and J. E. Adams (Eds.), Coping and adaptation. New York: Basic Books, 1974.

Hamburg, B. A., and Killilea, M. Relation of social support, stress, illness and use of health services. In Healthy people (DHEW, U. S. Public Health Service Publication No. 79-55071A). Washington, D. C.: U. S. Government Printing Office, 1979.

Hartfield, M. T., Cason, C. L., and Cason, G. J. Effects of information about a threatening procedure on patients' expectations and emotional distress. Nursing Research, 1982, 31, 202-206.

Henderson, S. Social relationships, adversity and neurosis: An analysis of prospective observations. British Journal of Psychiatry, 1981, 138, 391-398.

Henderson, S., Duncan-Jones, P., Byrne, D. G., and Scott, R. Measuring social relationships: The interview schedule for social interaction. Psychological Medicine, 1980, 10, 723-734.

Hill, B. J. Sensory information, behavioral instructions and coping with sensory alteration surgery. Nursing Research, 1982, 31, 17-21.

Hill, J. P., and Palmquist, W. J. Social cognition and social relations in early adolescence. International Journal of Behavioral Development, 1978, 1, 1-36.

Hirsch, B. J. Natural social supports and coping with major life changes. American Journal of Community Psychology, 1980, 8, 159-172.

Hirsch, B. J. Coping and adaptation in high-risk populations: Toward an integrative model. Schizophrenia Bulletin, 1981, 7, 164-172.

Hobbs, D. F., and Cole, S. P. Transition to parenthood: A decade replication. Journal of Marriage and the Family, 1976, 38, 723-731.

Hofmann, A. D. The impact of illness in adolescence and coping behavior. Acta Paediatrica Scandinavica, Supp. 256, 1975, 29-33.

Holahan, C. J., and Moos, R. H. Social support and psychological distress: A longitudinal analysis. Journal of Abnormal Psychology, 1981, 90, 365-370.

Hollingshead, A. B. Four factor index of social status. Unpublished manuscript, Yale University, 1975.

Holmes, T. H., and Masuda, M. Life change and illness susceptibility. In B. S. Dohrenwend, and B. P. Dohrenwend (Eds.), Stressful life events. New York: John Wiley, 1974.

Holmes, T. H., and Rahe, R. H. The social readjustment rating scale. Journal of Psychosomatic Research, 1967, 11, 213-218.

House, J. S. Occupational stress and coronary heart disease: A review and theoretical integration. Journal of Health and Social Behavior, 1974, 15, 12-27.

Hurst, M. W., Jenkins, C. D., and Rose, R. M. The relation of psychological stress to onset of medical illness. Annual Review of Medicine, 1976, 27, 301-312.

Jalowiec, A., and Powers, M. J. Stress and coping in hypertensive and emergency room patients. Nursing Research, 1981, 30, 10-15.

Janis, I. L. Psychological stress. New York: Academic Press, 1953.

Jenkins, C. D. Recent evidence supporting psychologic and social risk factors for coronary disease. New England Journal of Medicine, 1976, 294, 987-994; 1033-1038.

Jenkins, C. D. Psychosocial modifiers of response to stress. Journal of Human Stress, 1979, 5, 3-15.

Johnson, J. E., Rice, V. H., Fuller, S. S., and Endress, M. P. Sensory information, instruction in a coping strategy, and recovery from surgery. Research in Nursing and Health, 1978, 1, 4-17.

Jones, F. A., Green, V., and Krauss, D. R. Maternal responsiveness of primiparous mothers during the postpartum period: Age differences. Pediatrics, 1980, 65, 579-584.

Kahn, R. L. Work and personality in the middle years. Unpublished manuscript, University of Michigan, 1976.

Kahn, R. L. Aging and social support. Paper presented at the American Association for the Advancement of Science, Washington, D. C., 1978.

Kaplan, B. H., Cassel, J. C., and Gore, S. Social support and health. Medical Care, 1977, 15, 47-58.

Kaplan, H. B. Sociological theories. In I. L. Kutash and L. B. Schlesinger (Eds.), Handbook on stress and anxiety. San Francisco:

Jossey Bass, 1980.

Keating, D. P. Thinking processes in adolescence. In J. Adelson (Ed.), Handbook of adolescent psychology. New York: John Wiley and Sons, 1980.

Langer, E. J., Janis, I. L., and Wolfer, J. A. Reduction of psychological stress in surgical patients. Journal of Experimental Social Psychology, 1975, 11, 155-165.

Larsen, V. L. Stresses of the childbearing year. American Journal of Public Health, 1966, 56, 32-36.

Lazarus, R. S. The stress and coping paradigm. In L. A. Bond and J. C. Rosen (Eds.), Competence and coping during adulthood. New Hampshire: University Press of New England, 1980.

Lazarus, R. S., Averill, J. R., and Opton Jr., E. M. The psychology of coping: Issues of research and assessment. In G. V. Coelho, D. A. Hamburg, and J. E. Adams (Eds.), Coping and adaptation. New York: Basic Books, 1974.

Lazarus, R. S., Cohen, J. B., Folkman, S., Kanner, A., and Schaefer, C. Psychological stress and adaptation: Some unresolved issues. In H. Selye (Ed.), Selye's guide to stress research. New York: Van Nostrand Reinhold, 1980.

Lazarus, R. S., and Launier, R. Stress-related transactions between person and environment. In L. Pervin and M. Lewis (Eds.), Perspectives in international psychology. New York: Plenum Press, 1978.

Lee, P. D. K., and Newton, N. Cultural aspects of coping. International Journal of Social Psychiatry, 1981, 27, 13-22.

Leifer, M. Psychological changes accompanying pregnancy and motherhood. Genetic Psychological Monographs, 1977, 95, 55-96.

Levine, S., and Scotch, N. A. (Eds.) Social stress. Chicago: Aldine Publishing Company, 1970.

Lin, N., Dean, A., and Ensel, W. M. Social support scales: A methodological note. Schizophrenia Bulletin, 1981, 7, 73-87.

Looft, W. R. Egocentrism and social interaction in adolescence. Adolescence, 1971, 6, 485-493.

Lowenthal, M. F., and Chiriboga, D. Social stress and adaptation: Toward a life course perspective. In C. Eisdorfer and M. P. Lawton (Eds.), The psychology of adult development and aging. Washington, D. C.: American Psychological Association, 1973.

Lowenthal, M. F., and Haven, C. Interaction and adaptation: Intimacy as a critical variable. American Sociological Review, 1968, 33, 20-30.

Mason, J. W. A historical view of the stress field: Pt I. Journal of Human Stress, 1975, 1, 6-12.

McCarthy, J., and Menken, J. Marriage, remarriage, marital disruption and age at first birth. Family Planning Perspectives, 1979, 11, 21-30.

McCubbin, H. I. Integrating coping behavior in family stress theory. Journal of Marriage and the Family, 1979, 41, 237-244.

McCubbin, H. I., Dahl, B. B., Lester, G. R., Benson, D., and Robertson, M. L. Coping repertoires of families adapting to prolonged war-induced separations. Journal of Marriage and the Family, 1976, 38, 461-472.

McFarlane, A. H., Neale, K. A., Norman, G. R., Roy, R. G., and Streiner, D. L. Methodological issues in developing a scale to measure social support. Schizophrenia Bulletin, 1981, 7, 90-100.

McFarlane, A. H., Norman, G. R., Streiner, D. L., Roy, R., and Scott, D. J. A longitudinal study of the influence of the psychosocial environment on health status: A preliminary report. Journal of Health and Social Behavior, 1980, 21, 124-133.

McGrath, J. E. Major substantive issues: Time, setting, and the coping process. In J. E. McGrath (Ed.), Social and psychological factors in stress. New York: Holt, Rinehart and Winston, 1970.

McHugh, N. G., Christman, N. J., and Johnson, J. E. Preparatory information: What helps and why. American Journal of Nursing, 1982, 82, 780-782.

Mechanic, D. Illness behavior, social adaptation, and the management of illness. Journal of Nervous and Mental Disease, 1977, 165, 79-87.

Mercer, R. T. Teenage motherhood: The first year. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 1980, 9, 16-27.

Mikhail, A. Stress: A psychophysiological conception. Journal of Human Stress, 1981, 7, 9-15.

Miller, B. C., and Sollie, D. L. Normal stresses during the transition to parenthood. Family Relations, 1980, 29, 459-465.

Miller, S. M. When is a little information a dangerous thing? Coping with stressful events by monitoring versus blunting. In S.

Levine and H Ursin (Eds.), Coping and health. New York: Plenum Press, 1980.

Minde, K. K. Coping styles of 34 adolescents with Cerebral Palsy. American Journal of Psychiatry, 1978, 135, 1344-1349.

Mitchell, J. C. The concept and use of social networks. In J. C. Mitchell (Ed.), Social networks in urban situations. Manchester: Manchester University Press, 1969.

Moore, K. A., and Waite, L. J. Early childbearing and educational attainment. Family Planning Perspectives, 1977, 9, 220-225.

Moos, R. H. Psychological techniques in the assessment of adaptive behavior. In G. V. Coelho, D. A. Hamburg, and J. E. Adams (Eds.), Coping and adaptation. New York: Basic Books, 1974.

Muuss, R. E. Social cognition: David Elkind's theory of adolescent egocentrism. Adolescence, 1982, 17, 249-265.

Neimark, E. D. Intellectual development during adolescence. In F. D. Horowitz (Ed.), Review of child development research, Vol. 4. Chicago: University of Chicago Press, 1975.

Newman, B. M. Coping and adaptation in adolescence. Human Development, 1979, 22, 255-262.

Norbeck, J. S., Lindsey, A. M., and Carrieri, V. L. The development of an instrument to measure social support. Nursing Research, 1981, 30, 264-269.

Norbeck, J. S., and Sheiner, M. Sources of social support related to single-parent functioning. Research in Nursing and Health, 1982, 5, 3-12.

Nuckolls, K. A., Cassel, J., and Kaplan, B. H. Psychosocial assets, life crisis and the prognosis of pregnancy. American Journal of Epidemiology, 1972, 95, 431-441.

Offer, D. The psychological world of the teenager. New York: Basic Books, 1969.

Olds, D. The pregnancy stress and support interview. Unpublished manuscript, 1979. (Available from Comprehensive Interdisciplinary Developmental Services, 318 Madison Avenue, Elmira, New York 14901).

Ooms, T., and Machiocha, T. Teenage pregnancy and family impact: New perspectives on policy. Washington, D. C.: Family Impact Seminar, 1979.

Osofsky, H. J., and Osofsky, J. D. Adolescents as mothers. American Journal of Orthopsychiatry, 1970, 40, 825-834.

Panzarine, S., Friedman, M., and Sutter, C. S. Comprehensive prenatal services for pregnant adolescents. Journal of Current Adolescent Medicine, 1981, 3, 33-37, 39.

Parkes, C. M. Psycho-social transitions: A field for study. Social Science and Medicine, 1971, 5, 101-115.

Pascoe, J. M., Loda, F. A., Jeffries, V., Earp, J. The association between mothers' social support and provision of stimulation to their children. Developmental and Behavioral Pediatrics, 1981, 2, 15-19.

Paykel, E. S., Emms, E. M., Fletcher, J., and Rassaby, E. S. Life events and social support in puerperal depression. British Journal of Psychiatry, 1980, 136, 339-346.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., and Mullan, J. T. The stress process. Journal of Health and Social Behavior, 1981, 22, 337-356.

Pearlin, L. I., and Schooler, C. The structure of coping. Journal of Health and Social Behavior, 1978, 19, 2-21.

Pinneau Jr., S. R. Effects of social support on occupational stresses and strains. Paper presented at the 84th Annual Convention of the American Psychological Association, September 1976.

Plume, M. M. The structure of households: A study of 91 low income black domestic groups in Rochester, New York. Unpublished doctoral dissertation, University of Rochester, 1974.

Polansky, N. A., Chalmers, M. A., Buttenwieser, E., and Williams, D. P. Isolation of the neglectful family. American Journal of Orthopsychiatry, 1979, 49, 149-152.

Presser, H. B. Sally's corner: Coping with unmarried motherhood. Journal of Social Issues, 1980, 36, 107-129.

Prince, R., Frasure-Smith, N., and Rolicz-Woloszyk, E. Life stress, denial and outcome in ischemic heart disease patients. Journal of Psychosomatic Research, 1982, 26, 23-31.

Rabkin, J. G., and Struening, E. L. Life events, stress, and illness. Science, 1976, 194, 1013-1020.

Rodin, J. Managing the stress of aging: The role of control and coping. In S. Levine and H. Ursin (Eds.), Coping and health. New

York: Plenum Press, 1980.

Rosenstiel, A. K., and Roth, S. Relationship between cognitive activity and adjustment in four spinal-cord-injured individuals: A longitudinal investigation. Journal of Human Stress, 1981, 7, 35-43.

Roskies, E., and Lazarus, R. S. Coping theory and the teaching of coping skills. In P. O. Davidson and S. M. Davidson (Eds.), Behavioral medicine: Changing health lifestyles. New York: Brunner and Mazel, 1980.

Rossi, A. S. Transition to parenthood. Journal of Marriage and the Family, 1968, 30, 26-39.

Russell, C. S. Transition to parenthood: Problems and gratifications. Journal of Marriage and the Family, 1974, 36, 294-301.

Russell, C S. Unscheduled parenthood: Transition to "parent" for the teenager. Journal of Social Issues, 1980, 36, 45-63.

Rutter, M. Stress, coping and development: Some issues and some questions. Journal of Child Psychology and Psychiatry, 1981, 22, 323-356.

Sandler, H. M., Vietze, P. M., and O'Connor, S. Obstetric and neonatal outcomes following intervention with pregnant teenagers. In K. G. Scott, T. M. Field, and E. Robertson (Eds.), Teenage parents and their offspring. New York: Gr ne and Stratton, 1981.

Sandler, I. N., and Lakey, B. Locus of control as a stress moderator: The role of control perceptions and social support. American Journal of Community Psychology, 1982, 10, 65-80.

Sarason, I. G., Johnson, J. H., and Siegel, J. M. Assessing the impact of life changes: Development of the life experiences survey. Journal of Consulting and Clinical Psychology, 1978, 46, 932-946.

Scott, R., and Howard, A. Models of stress. In S. Levine and N. A. Scotch (Eds.), Social stress. Chicago: Aldine Publishing Company, 1970.

Selye, H. Confusion and controversy in the stress field. Journal of Human Stress, 1975, 1, 37-44.

Selye, H. The stress concept today. In I. L. Kutash, and L. B. Schlesinger (Eds.), Handbook on stress and anxiety. San Francisco: Jossey Bass, 1980.

Shantz, C. U. The development of social cognition. In E. M. Hetherington (Ed.), Review of Child Development Research (Vol. 5). Chicago: The University of Chicago Press, 1975.

Silber, E., Coelho, G. V., Murphey, E. B., Hamburg, D. A., Pearlin, L. I., and Rosenberg, M. Competent adolescents coping with college decisions. Archives of General Psychiatry, 1961, 5, 517-527.

Spivack, G., Platt, J. J., and Shure, M. B. The problem-solving approach to adjustment. San Francisco: Jossey Bass, 1976.

Stack, C. B. All our kin: Strategies for survival in a black community. New York: Harper and Row, 1975.

Suls, J., and Mullen, B. Life events, perceived control and illness: The role of uncertainty. Journal of Human Stress, 1981, 7, 30-34.

Thoits, P. A. Conceptual, methodological and theoretical problems in studying social support as a buffer against life stress. Journal of Health and Social Behavior, 1982, 23, 145-159.

Tolsdorf, C. C. Social networks, support, and coping: An exploratory study. Family Process, 1976, 15, 407-417.

Vaughn, B., Egeland, B., Sroufe, L. A., and Waters, E. Individual differences in infant-mother attachment at 12 and 18 months: Stability and change in families under stress. Child Development, 1979, 50, 971-975.

Visintainer, M. A., and Wolfer, J. A. Psychological preparation for surgical pediatric patients: The effect on children's and parents' stress responses and adjustment. Pediatrics, 1975, 56, 187-202.

Walker, K. N., MacBride, A., and Vachon, M. L. S. Social support networks and the crisis of bereavement. Social Science and Medicine, 1977, 11, 35-41.

Weinberg, S. L., and Richardson, M. S. Dimensions of stress in early parenting. Journal of Consulting and Clinical Psychology, 1981, 49, 686-693.

Weiss, R. S. The provisions of social relationships. In Z. Rubin (Ed.), Doing unto others. New Jersey: Prentice Hall, 1974.

Weiss, R. S. Transition states and other stressful situations: Their nature and programs for their management. In G. Caplan and M. Killilea (Eds.), Support systems and mutual help. New York: Grune and Stratton, 1976.

Wilcox, B. L. Social support, life stress, and psychological adjustment: A test of the buffering hypothesis. American Journal of Community Psychology, 1981, 9, 371-386.

Wilson, J. F. Recovery from surgery and scores on the defense mechanisms inventory. Journal of Personality Assessment, 1982, 46, 312-319.

Wolfer, J. A. and Visintainer, M. A. Pediatric surgical patients' and parents' stress responses and adjustment. Nursing Research, 1975, 24, 244-255.

Wolfer, J. A., and Visintainer, M. A. Prehospital psychological preparation for tonsillectomy patients: Effects on children's and parents' adjustment. Pediatrics, 1979, 64, 646-655.

Zelnik, M., and Kantner, J. F. First pregnancies to women aged 15-19: 1976 and 1971. Family Planning Perspectives, 1978, 10, 11-20.

Zuckerman, B., Winsmore, G., and Alpert, J. J. A study of attitudes and support systems of inner city adolescent mothers. The Journal of Pediatrics, 1979, 95, 122-125.